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**Manipulation through Affect and Evidential markers in
Legal Discourse:**

**A Study of the Hearings' Transcripts of Facebook's Chief
Executive Officer and the Letter of Facebook Team**

Dissertation submitted in Fulfilment of the Requirements for the Degree of Doctorate
'LMD' in Linguistics

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Dedication

To the spirit of my beloved father.

*To my family, my mother, my two brothers and my lovely elder and younger sisters for their
love and support.*

*To my husband and two Angels Nour-eddine and Ahmed for their existence and patience
when I was away.*

Ethical declaration

I, Fatima Zohra Moussa Sassi, certify that this thesis is my original work. It has been written by me, and has not been submitted for any previous degree. I attest that the intellectual content of this dissertation is the product of my own work and that all the assistance received in preparing this dissertation and sources used have been acknowledged. Furthermore, every source I used to get information, concepts, or words that I paraphrased or quoted in this dissertation has also been cited.

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List of Abbreviation

Abbreviation	Meaning of abbreviation
AI:	Artificial Intelligence
AT:	Appraisal Theory
CDA:	Critical Discourse Analysis
CEO:	Chief Executive Officer
CM:	Committee/Congress Members
Dr:	Doctor
DYI:	Download Your Information
FB:	Facebook
FT:	Facebook Team
FTC	Federal Trade Commission
GA:	Genre Analysis
H:	High
Inc:	Incorporated
IQ:	Intelligence Quotient.
ISIS:	Islamic State of Iraq and Syria
L:	Low
LD:	Legal Discourse
LTM:	Long Term Memory
M:	Medium
N:	Number
Q:	Questioners
SFL:	Systemic Functional Linguistics
STD:	Source Tagging Device
STM:	Short Term Memory
T1:	Transcript 1
T2:	Transcript 2
Txt:	Text
U.S.:	United State
W:	Witness
WDS :	Words

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Chapter One: Introductory Chapter

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Introduction

Language can be seen as a set of building blocks that, together, form a useful tool for social conviviality. The later is regulated and structured by a set of rules called Law. Law as a concept and language forms the legal discourse, that is the register in which the corpus investigated in this research falls. This corpus is composed of the Hearings' Transcripts and a Letter sent to the same congressional authority of the hearings. In this corpus, both evidential and affect markers or expressions are localised and analysed. The analyses have focused on the impact of these pragmatic markers or expressions on the interlocutors with the aim of causing shifts in the perception of a situation. This shift is known as the ideological impact that is the pillar of manipulative strategy. To arrive at this point, a quantitative research method is adopted for the extraction of the frequency of use of the investigated aspects, and a qualitative research method is adapted based on the combination of Systemic Functional Linguistics, Appraisal theory and Critical Discourse Analysis. It should also be mentioned that this research is a corpus-assisted research method that gathers both computational tools and other analytical tools to attain the research purpose.

This research is shaped into five chapters: the first is the introductory chapter; the second is the literature review chapter; the third is the methodological chapter; the fourth is the data analysis and discussion chapter; and the fifth is the conclusive chapter. In this introductory chapter, three main ideas are focused on: the first is the perception of linguistic manipulation; the second is the legal discourse involvement with manipulation; and the third is the linguistic (qualitative) tools used for the study of the pragmatic markers: evidentials and affect expressions. These three points have been made clear in the background to the research, the statement of the problem, and the research methodology sections, respectively. Specifically, this chapter is built starting with the background to the study that reflects the set of perspectives; these perspectives clarify the visualisation of the problematic of the research. The statement of the problem consists of the clarification of the gap that the research works on, which is the linguistic tools, or specifically the pragmatic markers used to achieve manipulation. The set of tools investigated in this research are evidential and affect expressions with the aim of detecting their complicity within the manipulative strategy, and this is the main purpose of the study. The later has led to the significance of the study, that is a modest set of contributions to the domain of Forensic Pragmatics. Having the aim of achieving those purposes and significance, the

research seeks to answer a set of questions and has listed some hypotheses that are presented in the research questions and research hypotheses sections, respectively. For the closure of the first chapter, both research methodology and research structure are clarified. The research methodology section explains the reason for which the theoretical analytical tools were chosen.

1.1 Background to the Study

Language is a tool of communication with the aim of exchanging knowledge, attitudes, values and perceptions. The production of any effective (meaningful) message requires the satisfaction of certain conditions. Some of those conditions concerning verbal communication are stated by Grice (1975), called Conversational Maxims, namely Quality, Quantity, Relevance, and Manner (Allott, 2010). Simply put, the message (talk or text) should be truthful, informative, relative to the context of interaction and simplified with regard to the addressee(s). The violation of any of those maxims gives birth to obstacles in understanding the discourse.

This research is built on a set of perceptions, principally based on the following studies: first, van Dijk (2006) argues that problems in understanding are caused deliberately in case of manipulation, like complicating the speech with ambiguous words, fast articulation and/or unfamiliar topics for the addressee(s), which refers to the abuse of the Quality, Relevance, and Manner maxims.

The violation of conversational maxims is also addressed by Maillat and Oswald (2009). They pointed out that the abuse of truth and felicity conditions are fundamental criteria for the elaboration of manipulation. They discussed the manipulative statement as the use of false propositions or plausible justifications, which means that manipulative statements lead to the abuse of the Quality and Relevance maxims.

Interestingly, Saussure (2005) asserts that pragmatic analysis methodology, in such cases (manipulative ones), shifts its interest from understanding the communication to working on the ways the message influences the audience's comprehension and adoption of belief. Saussure (2005) declares that the analysis of certain messages distinguishes between the 'linguistic meaning' transmitted and the required meaning by the context (linguistic meaning vs. relevant meaning). Furthermore, he insists on the common knowledge (cognitive aspect) and circumstances to achieve the best explanation; at this level, the intentionality of the speaker/writer is highly involved (2005, p. 116). Maillat and Oswald (2009) reviewed the hypothesis of Saussure (2005), by classifying the manipulative mechanisms and elaborating on

the cognitive aspect. They (Maillat and Oswald) insist on the significance of cognitive esteem in message coding, covertness, and intentionality as fundamental criteria for a successful manipulation.

Furthermore, Sperber and Willson (1995), Allott (2002, 2005), Allott and Fernandez (2002), Blass (2002), and Carston (2002) confirmed that one of the reasons for a successful manipulation is the misuse of a concept; in other words, this involves the mis-decoding of a concept(s) and misleading inference.

In the same vein, Aldridge and Luchjenbroers (2007) investigated framing questions and smuggling information use in legal discourse for manipulative aims. They concluded that lexical misuse of concepts affects the understanding process and then leads to a manipulative act. This is why Chomsky (1989) discussed the utility of interpretation and the effect of concepts' misuse on the audience's beliefs and acts as a result of an empirical research by Herman and Chomsky (1988) on political manipulation.

Similarly, Fetzer and Aijmer (2014), and Furko (2017) investigated political mediatized discourse. Furko (2017) argues that the study of pragmatic markers might be the best terrain to inspect manipulative discourse, because they are not interpreted but "spontaneously recognized", and that pragmatic markers convey the speaker's attitude towards/to the proposition (pragmatic inferences). He noted that the majority of research is focused on the 'semasiological approach' to particular pragmatic markers in English, like I think, of course, and really... (like in Simon Vandenberg, 2007, 1992, 1988), rather than the 'onomasiological approach' to sub-groups of pragmatic markers like evidential markers, general extenders, and quotation markers.

From an onomasiological perspective, Fetzer and Oishi (2014) applied functional analysis to both form and function of evidential markers in different discourse domains. Moreover, Mushin (2013) clarified the evidential coding as human motivation to share as regards knowledge source. Relevantly to this research, she noted that some public domains ethically force the speaker to share about the knowledge source, like in legal and media discourse. Yet, some researchers, like Aleksić (2016), Sidnell (2012), and Nuyts (2000), pointed out that evidentials could also be used in hedging responsibility. In addition to hedging, as believed in this research, evidentiality is implicated with many other epistemic aspects as agreed on by the majority of researchers on evidentiality. This specific point is elaborated on by Biber

and Finegan (1989) on both Evidentiality and Affect. In addition to evidentiality, affect expressions (markers), implication with self-expression and attitude are also agreed on by all of Biber (1999), Martin and White (2005), and Fulio (2015) and taken into consideration in this research.

Dealing with attitude, Matsui and Fitneva (2009) claim that credibility is seen as critically related to the source of knowledge, and for this reason hearsay is not allowed in courts. This point is fundamental in this thesis because it takes into consideration the question of evidentiality in legal discourse. Legal discourse is expected to be mostly informative; thus, it should be inductive, persuasive, argumentative and/or narrative. Legal discourse is a genre in which speakers violate the maxims to produce manipulation, as stated by van Dijk (2006) and investigated in the ongoing research. Furthermore, Johnson (2014) dealt with legal discourse. He stated that the majority of research studies have paid attention to police interviews (like in Johnson (2008), Jones (2008)), false confessions (like in Berk-Seligson (2009)), and lawyer consultations (like in Scheffer (2006)). In line with this literature, this research focuses on Congressional Hearings and a related Letter.

Furthermore, when the talk is about attitude and epistemicity, Halliday and Matthiessen (1997), Halliday (2008), and O'Donnell (2012) agree on the success of Systemic Functional Linguistics as a tool of discourse analysis. It is considered as a functional tool because it focuses on the way language is employed in social situations. Systemic Functional Linguistics has been used, as stated by Almurashi (2016), in different domains such as art (Ballantyre, 1996), educational linguistics (Christie & Martin, 1997), administrative language (Iedema, 2003), media discourse (Iedema, 2003), and many other areas. Consequently, this thesis has taken SFL as a relevant investigation tool for evidentials and affect as attitudinal expressions in legal discourse. And regarding the sociological aspect, critical discourse analysis is also concerned. It puts emphasis on ideology and power in social relations, as evidenced by Fairclough (1992), van Dijk (2004b), and Alaei and Ahangari (2016).

The problematic within these perceptions lies specifically in the lack of linguistic consideration of Manipulation in legal discourse. More details about this point are provided in the following section, namely the statement of the problem.

1.2 Statement of the Problem

Since many types of texts are manipulative to a certain degree (Saussure, 2005), legal discourse as a referential text to truth and justice is not expected to fall under such a rubric. This is to say that there is considerable doubt about the world's justice in view of the fact that rules are being broken, causing a loss of peace and instability.

One of the important clues for the innocence or guilt of people is language, in addition to other types of evidence. This is to say that, apart from the relationship between language and law as rules and legal documents, language is also taken as a piece of evidence. Furthermore, language as rules would, normally, in no way contain meaning defects, fissures, or impurities. However, language as a legal process or as evidence is hypothetically a playing-ground for deception and manipulation, which poses an ethical problem.

It is worth clarifying that, in daily communication, manipulation would be quite hard to detect because of the impossibility of knowing interlocutors' intentions. However, in legal discourse, the later can somehow be detected. For police agents, lawyers, judges, and congress members, intentions are mainly based on the interviewee's (accused or witness) confession or failure to defend, which leads to declaring them to be guilty. Conversely, the other party's intentions are to be vindicated as innocent, inapt for being interviewed, a victim of a third party, or at least an associate.

In this regard, the interviewees try to be cautious. They communicate (answer or narrate) a specific version to appear less implicated in the case because all that they say is going to be used as evidence against them. So, the language used is the tool to communicate the version of what they, allegedly, know. Meanwhile, they tell about their commitment towards the events, persons and the case itself.

In Linguistics, some knowledge and commitment tools are Evidential and Attitude Markers. Evidential and Attitude Markers are a set of lexical and grammatical items that mirror speakers' knowledge, mode of knowing, attitude, affective state, and judgmental and appreciative position. So, to investigate speakers' positioning with regard to other parties, the case itself, and the way speakers perceive interlocutors and others, and also the information declared as belief, reference, sensorial or reported Evidential and Attitude markers are the most relevant tool(s).

This is to state that, in this research, the manipulative type and strategy in such discourse (Hearings or Letter) are being investigated through Evidential and Attitude Markers. Evidential Markers relate to all stated types of knowledge as belief, reference, sensorial or reported, and witness' commitment, hedging, and reliability. Concerning Attitude Markers, Affect markers are taken into consideration to enlighten speakers' emotional status and strategy in this corpus.

1.3 Significance of the Study

The current study mainly contributes to the literature on evidentiality, generally, and specifically in legal discourse. It develops the Evidential Taxonomy adopted by Chafe (1989). Furthermore, this study contributes to the literature in the Forensic linguistics field. It specifically attracts the attention of forensic linguists to the manipulative use of affect and evidential expressions in legal discourse and helps the judiciary system pay attention to the abuse of legal discourse norms and to the interviewers' and witness' reliability and cooperativeness.

This research also confirms Bhatia and Salmani-Nodoushan's (2015) perception of genre 'dynamicity'. This perception mainly focuses on the attempt to broaden the understanding of genre out of context to be freed of the 'hybrid' frame of the genre when linguistic analyses are conducted.

1.4 Research Objectives

The purpose of this thesis is to attract the attention of linguists to evidential expressions' impact on the hearers. It pursues the frequency of use of affect and evidential expressions in both spoken and written data with the aim of exposing the extent to which the speaker or writer is being cooperative (manipulative or informative) as a first step. Second, it works on investigating evidential and affect expressions' implications in serving manipulative aims in legal discourse. Third, it seeks to contribute to the notion of hedging and manipulation in legal discourse. And, fourth, it attempts to establish a model of framework analysis for legal discourse based on SFL and CDA. To serve these purposes, certain questions are in order. Those questions are listed in the section below.

1.5 Research Questions

The research's main questions are:

1. Do affect and evidential markers work for manipulation?
2. How do affect expressions (markers) contribute to the manipulateness of a text?

3. How do evidential expressions (markers) contribute to the manipulateness of a text?
4. What manipulative mechanisms are stimulated by affect and evidential expressions?
5. Is spoken or written discourse highly to be considered as reliable legal discourse?
6. Is it possible to investigate specific markers in discourse to determine the speakers' position and knowledge about a specific situation?
7. Is Chafe's (1989) taxonomy sufficient to be investigated as tracing evidentiality in Legal Discourse?

The following section presents the hypotheses that could be confirmed (or denied) by this research.

1.6 Research Hypotheses

This research is mainly built on the hypothesis that the majority of texts could be manipulative and that ideological impacts could be made throughout Affect and Evidential expressions. The following hypotheses are generated from the main hypothesis:

1. Affect and evidential markers influence the hearers' perception of the speaker from emotional and epistemic states. Thus, if these linguistic units are used deceptively, the hearer(s) could be manipulated.
2. Affect expressions reflect the speaker's emotional state that is communicated with the aim of creating an impression (image) to affect the hearers' perception.
3. Evidential expressions reflect the speaker's attitude, commitment, reliability, and authority with the aim of showing social power and affecting the hearers' perception.
4. Through evidential and Affect expressions' influence on the hearers, a change in the hearers' perceptions is made and this is a manipulative act.
5. As pointed out in the literature review, the spoken discourse would be manipulative; so, as a legal discourse, the written material would be a more reliable discourse.
6. Evidential expressions in discourse would reflect speakers' position and knowledge about a specific situation.
7. Chafe's (1989) taxonomy is not sufficient for the investigation of evidential markers in discourse, and even the adaptation of this taxonomy would leave some evidential expressions undetected.

With the aim of investigating these hypotheses, the methodology adopted is presented in the section below.

1.7 Research Methodology

Any choice of a specific word is maintained for specific purposes, i.e, no term is simply randomly used. Besides, Eggins (2004, p. 20) states that the ‘actual linguistic choice’ is, according to the speaker, the appropriate meaning made among a set of ‘potential linguistic choices’. Therefore, it is possible to say that both actual and potential linguistic choices share the situation of interaction and diverge from the speaker’s objectives. In this perspective, Eggins (2004, p. 16) provides the example of the words ‘brat vs. child’; she comments that the use of ‘brat’ instead of ‘child’ transmits the speaker’s negative attitude to the interlocutor.

Since one of the interests of this research is attitude, the study focuses on actual linguistic choices made by speakers in comparison with the choices they could have made, respectively to Register, which is considered by Halliday to be the leader of ‘intuitive understanding’ (Matthiessen & Halliday, 1997; as cited in Almurashi, 2016, p. 73). However, the study of texts with no consideration of grammar is considered by Halliday (1994; as cited in Eggins, 2004) to be an incomplete discourse analysis. Consequently, the research considers lexical, tense, pronouns, and structural choices. These aspects can be investigated based on Systemic Functional Linguistic (hence, SFL) analysis. Thus, SFL is used in this research for the following reasons:

SFL is based on belief in the interface between discourse, meaning, and speaker’s objectives. Furthermore, it seeks the speaker’s objective(s) through the language used. Halliday (1997) insists on the strong implication of function and meaning in the construction of Form. Moreover, he believes that a sentence, as a whole, is the fruit of the speaker’s communicative objective(s). Halliday sees that linguistic analysis of a text must be the investigation of the functional dimension of a clause, in addition to the speaker’s objective(s) behind the communication of that clause (Matthiessen & Halliday, 1997, as cited in Almurashi, 2016, p. 72).

This research works on the problematic discourse of important events around the world. Likewise, says Halliday (2008; as cited in Almurashi, 2016, p. 74), SFL is a linguistic theory that is applicable to linguistic inquiries of specific groups.

By paying attention to the lexico-grammatical choices, the representation of clauses can be exposed, respectively to the transitivity scheme. The later helps in locating the ideational

meaning and, then, the topic of interaction (Field). The results would assist to highlight the ideology (opinions) on a topic and the fuzziness or deception committed by the speaker, if any.

The interpersonal meaning of a sentence must indicate the relationship between the interlocutors (known as Tenor). The participant's relationship is one of the keys to designing a manipulative strategy. And this is what Critical Discourse Analysis (henceforth CDA) works on: social power relations. The later is identified by van Dijk (1998) as the pillar of the pragmatic concept of 'ideology' that is deeply implicated with manipulation and that CDA pays great attention to. The previously discussed points reflect the theoretical perspective and methodology, whereas in the following paragraphs, the practical methodology is reviewed.

With the aim of investigating the role occupied by Affect and Evidential expressions in the service of manipulation, these expressions have been extracted from written and spoken legal documents by the UMA corpus tool. The expressions have been annotated in the corpus, classified, listed, and tabulated. The results have shown the frequency of use of each type of affect and evidentials, and the lists have been treated with the aim of extracting the reasons for the use of the expressions which serve the speakers' communicative objectives. These speaker(s)'s communicative objectives have been studied according to the hearers' potential attained impact, which leads to a shift in the hearers' perceptions. It is worth mentioning that the study has taken into consideration both parties: the question senders and the responder team in the Letter, and congress members and the witness in the Hearings' Transcripts. This thesis is built upon five chapters, as stated in the following section.

1.8 Research Structure

This research is built on five chapters, divided into sections and subsections. The first chapter consists of an initiation to the global research perceptions and ideas. It has made clear the background of the research in terms of ideological perception, second, the problem that the research has dealt with, and third and fourth, the purpose and significance of the research, respectively. Fifth, the research provides a set of questions and hypotheses. The sixth subsection provides the theoretical and practical methodologies. Finally, the chapter ends with the thesis structure.

The second chapter is the literature review, which gathers a set of four main parts: first, manipulation as the investigated phenomenon in discourse; second, Affect and Evidential expressions in discourse as representatives of the speaker's perception of self, other, and

situations, in addition to expressed knowledge sources. The third part deals with the theoretical frameworks that comprise mainly Systemic Functional Linguistics and Critical discourse analysis. And finally comes the domain that this research touches upon, which is Legal Discourse and Forensic Linguistics.

The third chapter is the research framework, in which all of the information about the methodology (corpus-assisted method) and the corpus are exposed. The fourth chapter provides the research findings, data analysis, and discussions in two sections. The first section, namely findings and data analysis, consists of the results in the form of tables, charts, and some expressions retrieved from the UMA corpus tool. Those findings are interpreted and analysed regarding their context of use. The second section is the discussion part, that represents the involvement of affect and evidentials within manipulation in discourse.

The fifth and last chapter of this research is the conclusive chapter. It is composed of four sections: The first section gathers the significance of the findings, whereas the second section shares the synthesis of the main findings, that is composed of major findings, the implementations, and the contributions of the research. Also, the three other sections are: validation, limitations, and suggestions for future research, respectfully.

Conclusion

This chapter provides a concise overview of the background and context of this study, where it briefly mentions related studies in the literature, with a special focus on the most pivotal works in the domain. Furthermore, this chapter explains the research problem, its significance, and the primary objectives of the study. The chapter also outlines the main research questions, followed by the hypotheses suggested. Moreover, it includes a brief discussion of the choice of research methodology and concludes by discussing the research design and organisation of the dissertation.

Chapter Two: Literature Review

Chapter Two: Literature Review

Introduction

In this chapter, the focus is mainly on the illumination of all of the manipulative discourse and its features, affect and evidential markers' types, and their impact on discourse, the adapted Systemic Functional Linguistic (SFL) and Critical Discourse Analysis (CDA) frameworks, and finally Legal Discourse features. In addition to the previous axes, it seems important to mention the closely related field to this research, namely Forensic Linguistics.

This chapter is divided into five sections, starting with research on manipulation, affect, evidentiality, Systemic functional Linguistics and Critical Discourse Analysis, and finally Legal Discourse and Forensic Linguistics. The first section, research on manipulation, is a research that closely investigates the manipulative procedure. The second section, research on affect, examines the affect markers' types and perception. The third section, research on evidentiality, highlights the evidential markers' types and epistemic value. The fourth section reviews work on linguistic analysis tools, the chosen analysis perceptions for this research (SFL and CDA). These tools are identified and perceived in regard to the needs of the research. The fifth section, research on Legal Discourse, is concerned with Legal Discourse as an insufficiently inspected yard of manipulation. The sixth and last section, research on Forensic Linguistics, tackles this related field of research.

2.1 Research on Manipulation

The notion of manipulation is seen as a natural phenomenon that comes naturally with language use (Maillat & Oswald, 2009). It is a means to answer the manipulator's needs by affecting the manipulated person's beliefs and behaviour (Akopova, 2013). To achieve this kind of influence, a manipulative strategy/procedure is followed; in which some conditions must be met. In other words, for a successful manipulation, the manipulator tends to use a set of social, psychological, and linguistic mechanisms, mostly directed towards causing obstacles at hearer (reader)'s message processing.

This research on manipulation gathers the definitions of the later as social, psychological, linguistic, and cognitive phenomena to clarify the underlying mechanism and introduce the categorization of the criteria for manipulation.

The criteria of manipulation are classified into linguistic, social, psychological, and cognitive mechanisms. These mechanisms are sectioned in this part of the chapter. The

linguistic mechanism, first, seeks to provide some insights into manipulative discourse features with regard to the linguistic type and both semantic and pragmatic fields vantage points. Then, the social mechanism deals with all of the speaker's interests and the social positions of the interlocutors. After that, the psychological mechanism of manipulation is focused on 'intentionality'. The last mechanism is the cognitive one, where the cognitive esteem of the manipulated is seen as an interesting criterion, and problems of understanding are also reconsidered as a central and specific touch of manipulation. These mechanisms are classified to help in the recognition of the manipulative process.

The potential contribution of the present dissertation lies in the synergy between the dimensions of affect, evidentiality in legal discourse, with a view to demonstrating the aggregated effect of these components and their role in constructing a manipulative discourse. As previously mentioned, the first point to be tackled is the definition of manipulation, as seen in the following section.

2.1.1 The Definition of Manipulation

Manipulation is a concept that has been studied from mainly social, psychological, socio-psychological, and linguistic angles. For the sake of this research, manipulation is investigated from the social, psychological, linguistic, and cognitive angles. However, the focal vantage points are the semantic and pragmatic angles, in addition to some discursive and stylistic angles. To start, in the following subsection, the phenomenon of manipulation is identified from a social perspective.

2.1.1.1 Manipulation as a social phenomenon. Manipulative discourse is introduced by Martıno Rojo and van Dijk (1997) as being a person's 'illegitimate influence' on discourse (as cited in van Dijk, 2006); the word 'illegitimate' often reflects a social hint. Thus, manipulation is socially the wrongful/unlawful use of some techniques in communicating a discourse. Few research papers (if any) see manipulation as a uniquely social or psychological phenomenon. That is why it has been mostly introduced as a social and psychological 'negative' exercise (Akopova, 2013) to stimulate others to behave in an unfavourable way to their wishes and interests (Mey, 2001). This point of view is agreed upon by Saussure (2005), Van Dijk (2006), and Akopova (2013). So manipulation, as a social phenomenon, is the dishonest and wrongful act of using others without their consent. In the same line with this, in the next subsection, the second parameter, 'psychological dimension' identifies manipulation.

2.1.1.2 Manipulation as a psychological phenomenon. The influence practiced by any kind of pressure or technique to abuse a person's psychological or physical independence is called manipulation (Laurens, 2003). Laurens confirms Roustang's (1990) definition, whereby he refers to manipulation as an intentional influence secretly used through habitual communications.

A strong relationship is drawn out between manipulation as a psychological and cognitive phenomenon. To this effect, Saussure states: "the more confident the hearer is, the less critically he thinks, and the more efficiently the manipulator is likely to achieve his persuasive goal" (2005, p. 131). This quote explains how the psychological status of a person could affect the rational device processing. That is to say, to deceive the rational device, it is eminent to make the targeted person feel confident in the speaker. Saussure says 'the more confident', which means that the more confident the addressee is in the interlocutor, the easier s/he is to be manipulated. The quote remains plausible when interpreting 'the more confident' as the higher self-confidence the addressee owns, the lower critical thinking is developed. This argument was noted by Akopova (2013) as productive type of manipulation (see below the section on 'Types of manipulation').

As mentioned above, manipulation in this paper is studied from the social, psychological, linguistic, and cognitive angles. After interpreting manipulation from social and psychological perspectives, the following is the linguistic perspective of manipulation.

2.1.1.3 Manipulation as a linguistic phenomenon. Manipulation is the ‘influence exercised’ by the subject on the object of communication through verbal (speech) and/or non-verbal (gestures, facial expressions, pictures, etc.) exchanges; this kind of communication is built to achieve certain goals that consist of modifications and changes in the addressee’s behaviour, perceptions, and intentions (Akopova, 2013). Simply put, it is the cause of shifts in the addressee’s belief and/or behaviour for a specific purpose through a (non)verbal exchange.

The focus of this study is mainly on the verbal means of manipulation, that is called manipulative discourse. The "manipulative discourse" is a discourse with no specific signs of manipulation, either lexical or grammatical. However, it is distinguished as manipulative by association with the intentions of the speaker, the ambiguous utterance, in addition to the communicative situation (Akapova, 2013). On this score, there is agreement between Akopova (2013), Maillat and Oswald (2009), van Dijk (2006; 2015), and Saussure (2005). Furthermore, manipulative discourse is an act of communication where the addressee is guided to develop fake inferences or assumptions (Maillat & Oswald, 2009). It can be exemplified as a dramatic play written and acted by an interlocutor to make the addressee cry and clap hands at the suitable scene. To this effect, the focal point of the present dissertation sets the linguistic angles of semantics and pragmatics into relief. The fourth and last angle of perception of manipulation is the cognitive perception that is seen underneath.

2.1.1.4 Manipulation as a cognitive phenomenon. Manipulation is the abuse of the natural cognitive processing of a message. In other words, it targets the rational and emotional sides of the addressees' minds to achieve specific interests (Akopova, 2013); that is why manipulative discourse may have resemblances to mental influence based-discourse such as informing, persuasion, and teaching (van Dijk, 2006). More precisely, manipulative discourse is proven as a contextual concern; once it comes to context, addressee’s interpretation and cognitive environment are involved (Saussure, 2005). The later are the basis for the understanding process in regard to the communicative situation. In this vein, Saussure declares:

“...manipulation involves cognitive processes; my main hypothesis is that normal interpretive processes are troubled at the level of intention recognition, which involves a specific cognitive device (mindreading module). I suggest that this trouble is achieved with a set of converging strategies leading the hearer to problems of understanding, – notably, but not only, because of unclear propositions and arguments. I also note that many aspects that were evoked in this paper require much further elaboration and research” (2005, p. 140).

From this quote, it is possible to see Saussure's belief in the connectivity of manipulation and cognitive process, as well as his perception of cognitive manipulation. He suggests that it principally deals with intention falsification, that could be established by assembled mechanisms. The mechanisms that lead the addressees towards the ostensive safe intentions are related to the mechanisms that cause difficulties in understanding. He states that fuzzy statements and misleading justifications are tools for understanding difficulties stimuli.

Furthermore, this researcher develops about the device responsible for the detection of intentions, that he simply calls 'specific cognitive device' and refers to it as a 'mindreading module'. This seems acceptable since, as is known, mindreading is a process carried out to discover others' uncommunicated thoughts.

Understandably, Saussure states a cancellation or an expression of doubt when he says: "...this paper requires much further elaboration and research" (p. 140), because he relates manipulative intention, which is a consequence of the deceptive role played by manipulators to convince the addressees of their communicative cooperativeness, with the interpretative and understanding issues to conceive a manipulative strategy. Yet, both manipulative intention construction, interpretative and understanding issues can be separately seen as steps of the manipulative strategy. This point is to be clearly dealt with in 'Cognitive manipulative mechanisms'.

In brief, manipulation as a cognitive phenomenon is generally the violation of the natural cognitive process of information interpretation. This violation is discursively (through discourse) achieved. Unlike social and psychological factors, the cognitive factor is strongly dependent on the linguistic factor.

Still, a cancellation can be drawn out when knowing that "[m]any people are not totally manipulation prone [ibid]", affirms Saussure (2005, p. 140). He argues that a condition of manipulation is the recognition of the manipulator's super-competence. The proposed perspective capitalises on the importance of investigating the social power mirrored by the interlocutors in the corpus under investigation. It also points out an interesting observation of a non-potential-manipulated person. In this section, manipulation is defined from varied angles, with the aim of preparing for the different mechanisms of manipulation that are discussed in the following section.

2.1.2 The Mechanisms of Manipulation

The major aim of manipulation is to make the addressees 'uncritically' accept the information, and develop an 'illusion' that influences their emotional and/or rational sides (Akopova, 2013). That is why the manipulative act is constructed by specific mechanisms that

were studied and investigated by many researchers, such as Saussure (2005), van Dijk (2006; 2015), and Maillat and Oswald (2009).

The mechanisms are classified differently by researchers. Saussure (2005) classifies the mechanisms into two main categories: global and local. The global category deals with linguistic tools to accomplish the social and psychological manipulative conditions, whereas the local category concerns the problematic interpretative linguistic tools as it deals mostly with utterance processing (2006). Maillat and Oswald (2009) elaborate this division into five factors and add a new cognitive factor inspired from Saussure's (2005) paper on 'Manipulation and Cognitive Pragmatics'.

In this dissertation, the mechanisms are classified into four main categories: linguistic, social, psychological, and cognitive, respectively, in which Maillat and Oswald's (2009) division is strongly taken into consideration. The categories cannot be completely separated from each other, because they are meant to create a specific environment. This is why van Dijk (2006) insists on the utility of both related social and psychological factors to successfully achieving manipulator's goals. This is to say that in this research, the linguistic aspects investigated in discourse must serve one or many of those mechanisms in a way or another, regarding Saussure's (2005) belief shared by this paper that all discourses are gradually manipulative. In the following, the first mechanism, namely linguistic, is discussed.

2.1.2.1 The Linguistic mechanisms. It seems logical that all texts as previously stated are considered as manipulative to some extent (Saussure, 2005). Despite the fact that linguistic features may not distinguish manipulative texts, claim both (Saussure, 2005) and (Akopova, 2013), manipulative texts can be investigated textually as a type of discourse, and contextually from semantic and pragmatic perspectives. The textual investigation deals with the whole text as language use, whereas the contextual investigation generally concerns fuzziness and confusion tools.

2.1.2.1.1 Manipulative discourse as language use. Manipulative discourse can be seen either as a type of discourse or as a type of language use, according to Saussure (2005). On the one hand, he considers manipulative discourse as a type of discourse such as narration and theatre plays, which necessitates the existence of specific linguistic forms or structures distinctive of this type (e.g., argumentative). These specific linguistic criteria would help in the recognition of manipulative discourse. Yet, Saussure (2005) confirms the fact that no specific criteria could be used to typically identify manipulative discourse. Still, some criteria exist in manipulative discourse more than in non/less-manipulative discourse. He sees the frequency of

the occurrence of those criteria as a clue indicating that they contribute to the creation of a manipulative strategy. Many researchers agree on this point (see Akopova, 2013, for instance). On the other hand, Saussure perceives manipulative discourse as a type of language use in which the existence of some ‘argumentative devices’ with ‘formal and non-formal fallacies’ is a must. He also affirms that the linguistic structure is developed by the speaker for certain pragmatic aims (2005). That is to say that in this research, manipulative discourse is taken for a type of language use, and the shared criteria concerning the specific investigated aspects (Affect and Evidentials) are taken for hired tools for manipulation. This is the reason for which two discourse genres (written and spoken) are used, with the aim of differentiating between the use of Affect and Evidentials and relating this use with the attitude and expected potential intentions, respectively, to the situation and discourse settings.

In the same context, van Dijk (2006) points out that manipulative discourse is more of a contextual strategy than a textual structure, which confirms that the manipulateness of this discourse is more associated with context than it is linked to text. The implication of manipulation with the context and language use with fewer textual linguistic tools is also debated in the following subsection when dealing with the semantics and pragmatics of a manipulative text.

2.1.2.1.2 *Semantics and pragmatics in manipulative discourse.* Remarkably, few researchers have developed arguments on the semantic features of a manipulative discourse because it deals mostly with the pragmatic level of the statements rather than the semantic one (Saussure, 2005). In this concern, some researchers list common potential features in manipulative discourses. Van Dijk (2003, 2006), on one hand, lists some features that can be divided into semantic and pragmatic features; these features are basically the reflection of the image of self and others. On the other hand, Saussure states a set of ‘Global’ and ‘Local’ strategies used in manipulative discourses, in which global strategies can be distinguished as semantic features of manipulative discourse, and the local ones are seen as pragmatic features. In this research, these lists are used as referential norms for the analysis of the corpus, in addition to other aspects. The next subsection exposes these lists, respectively.

2.1.2.1.2.1 Semantic features of manipulative discourse. Semantic features of manipulative discourse are a set of criteria observed as common to manipulative discourses. Van Dijk's (2003, as cited in van Dijk, 2006) semantic features are generally based on self and other positive and negative representation; the list includes:

- Semantic macrostructures: (like the selection of topic, it is where the speaker (de-) emphasises negative/positive topics about Us/Them).
- Local meaning: it is when the speaker shows Our/Their positive/negative actions, gives many (or few) details, general (or specific), vague (or precise), explicit (or implicit) ...
- Local syntax: it is mostly about active vs passive expressions, and also about the nominalization that positions agency and responsibility underlined as ours or theirs.
- Rhetorical figures like the use of hyperbole or euphemisms, or even the expressions of metaphors or metonymies positively or negatively highlighted as ours or theirs.

In addition, he notifies the implication of the expressions of spoken as loud, fast... and written as large, bold...as potential manipulative features. Differently, Saussure's semantic features (local strategies) are about (de)personalisation of the addressee within familiar concepts and events, and obviously targeting the creation of a shared atmosphere (2005). They are a set of features used together to defeat the clarity of statements; these features are, as stated by Saussure (2005):

- The use of specific connotative words: the manipulator tends to spread and repeat specific words that represent in daily conversations a 'symbolic weight'.
- Specific connotative words are also used in naming some ordinary elements of the environment; this act of naming is mostly to make the addressee(s) (manipulated group) in touch with those words more often for specific purposes.
- 'Generalisation of a new terminology': is used to generate vagueness and ambiguity, thus complicating the extraction of meaning.
- 'Unmotivated or misleading analogies': are hired by the speaker to make the interpretation of the information a problematical process. Thus, the addressee feels the incapacity to treat the discourse.
- 'Acronyms, abbreviations, and numbers' are used for two main reasons: to distract the addressees' attention and make them face problems in matching information; or to construct a personalised and shared atmosphere with the hearer.

Apparently, semantic features are tools used by the speaker to install ambiguity at the textual level with the purpose of distracting the focus of the addressee. The later contributes to

the conception of fuzziness as a pragmatic necessity in manipulative discourse, which is the ambiguity at the contextual level.

Furthermore, the “Lexicon” as a semantic and pragmatic feature is shared by both van Dijk’s and Saussure’s lists. Van Dijk (2006) sees the ‘lexicon’ aspect as the speaker’s selection of words to positively represent the manipulative group or individual (‘us’) and negatively introduce the other (them). Unlike, Saussure (2005) perceives the ‘lexicon’ as the use and exclusion of some words/items for strategic purposes. This point is fundamentally taken into consideration in this research. Since this paper mostly investigates the contribution of affect and evidentials in the manipulative strategy, the exclusion and inclusion of some evidentials and affect would be suspected, especially when dealing with legal discourse. In addition to those semantic features listed by Saussure and van Dijk, the following subsection presents the pragmatic features implicated with manipulation in a discourse.

2.1.2.1.2.2 Pragmatic features of manipulative discourse. Pragmatic features are seen from a general perspective by Akopova (2013). She deals with the topic of interaction; when it is about past actions, like narration in legal discourse, it is a case of ‘confirmation with objective reality’ (p. 79). However, when it is about an associated discourse with the future, like promises in political discourse, it is a case of ‘the pragmatic factor’ of the speaker’s frankness (p. 78). This is to say that the manipulation in discourse could be defeated in the narration in comparison to reality. However, it could barely be discovered when dealing with the future, because it basically relies on the frankness of the speaker. Since in this research the corpus used talks about past, present, and future actions, this case would undoubtedly be reviewed when analysing.

In more detail concerning the pragmatic features, van Dijk (2006) sees that manipulative discourse's pragmatic features as typically about ‘positive self-representation’ and ‘negative other- representation’ strategy, and macro and local speech acts. This is to say that it is the strategic, implicit, or explicit representation of self as good and the other as bad.

In the same context, it is worth mentioning that Saussure (2005) puts stress on the functionality of the linguistic units of manipulative discourse (i.e., he is precisely investigating the function of specific words and forms with regard to the aim after such a choice by the speaker). He notes that the majority of manipulative texts/speeches share the pragmatic factor “fuzziness” (vagueness and confusion), with the aim of disturbing the hearer’s concentration. This point is further elaborated when dealing with the cognitive mechanisms. Saussure deals

with the pragmatic features of manipulative discourse in regard to fuzziness production tools that he calls ‘Local strategies’, and truth and felicity conditions, as seen in the following:

2.1.2.1.2.2.1 Fuzziness production tools. Fuzziness is a fundamental dimension of the strategies engaged within manipulative discourses; it guides the addressee towards interpretative problems (Saussure, 2005). Fuzziness production tools, called ‘Local strategies’ by Saussure, are tools used by the speaker to complicate the decoding of the utterance (the interpretation). That is to say, these tools are generally the employment of vague and ambiguous terms or propositions into a manipulative discourse. Fuzziness production tools highlighted by Saussure (2005) are multiple. Four of these tools that seem to be relevant to this research are mentioned in the following:

Firstly, Lie, that is, “...at the core of the manipulative process”, believes Saussure (2005, p. 126). In the same vein, Maillat and Oswald (2009) infer that manipulative statement falls under the act of lying by sharing the perception of Rigotti (2005). They believe that the manipulative statement typically twists the verity in the addressee’s mind because it turns the positive idea into a negative one (Rigotti, 2005, as cited in Maillat and Oswald, 2009). Thus, it defeats the sincerity principles and causes confusion.

Second, misuse of concepts is a tool to deceive the addressees; it works on deviating their attention away from the central information (Allott, 2005). Allott (2005) developed three main models of misuse of concepts: the code-word model, the reflective belief and attributive concepts model, and the last one, the pragmatic illusion model. These models of misuse of concepts are expected to be found in the discourse. For this reason, they are exposed, respectively, in the following:

- The code-word model: according to this model, a concept may be misused when it has as a minimum two different connotations (meanings); thus a concept is produced in one meaning and received, interpreted, or understood by the addressees in the other meaning. Allott sees the misuse of concepts as the use of ‘slippage’ between expert and non-expert perception of a word in regard to their background knowledge, where the expert is aware of this distinction (‘anomaly’).
- Reflective beliefs and attributive concepts are based on Sperber’s (1997) insight on intuitive and reflective beliefs in Relevance Theory. The reflective belief is the belief drawn out of a credible attitude, says Allott (2005). It is a belief in the credibility of knowledge sources like ‘tribal elders’, ‘science’, or ‘religion’. Some examples are provided by Allott (2005) to clarify this kind of belief: “It is absurd that..., It is a

scientific fact that... or The tribal elders believe that. . ." (p.156). The derived belief from such an attitude is also called attributive, according to Allot (2005). That is how to come to the attributive concepts. That is to say, some concepts are, maybe, just adopted as a notion or with the simplest connotation. To clarify this, an example from Sperber's (1997) may be used:

"Lisa hears her science teacher say[ing] [t]here are millions of suns in the universe. Lisa forms the beliefs: (a) The teacher (who is to be trusted on such matters) believes there are millions of 'suns' in the universe. (b) There are millions of Sun-like things in the universe. (c) There are millions of 'suns', whatever the teacher means by 'sun', in the universe [ibid]" (as cited in Allott, 2005, pp. 156-157).

- As for the Pragmatic illusion model, as stated by Allott (2005), it is, according to psycholinguists, a form of cognitive illusion called also 'shallow processing'. The misuse of a concept, he continues, such as a pragmatic illusion, means to have no access (or partial access) to the meaning of a certain concept despite the familiarity of the addressee with the meaning of this concept or the information, like the well-known Moses illusion (cf. Allott, 2005).

Third, pseudo-mystical discourse is the use of notions, expressions, terms, similar expressions, arguments, examples... from the religious discourse in supporting unreligious aims; or simply for political, group, or personal interests (Allott, 2005). This feature is used with the aim of emotionally affecting the audience and gaining credibility and authority (Allott, 2005).

Fourth, and last, rhetorical devices are a tools that may express solid presuppositions. Saussure (2005) gives the example of rhetorical questions and claims that they are to some extent effective. An example is provided by Saussure: "Which traitor would give our homeland to the imperialists?" In such a question, the presupposition expressed is that "anyone disagreeing with the speaker is a traitor" (p. 128).

The relevance of these fuzziness tools to the present research lays on the belief of meeting these pragmatic features in the corpus analysed. In addition to fuzziness tools, conversational maxims as a pragmatic feature concerned with manipulation are discussed in the succeeding subsection.

2.1.2.1.2.2.2 Conversational maxims and manipulative discourse. The conversational maxims enumerated by Grice (1975) are hard to fulfil even in daily conversations, says van Dijk (2006). Thus, it is unsurprising to face the violation of these maxims in manipulative discourse.

Saussure (2005) discusses manipulative discourse as a set of propositions with regard to truth and felicity conditions, which means he looks at the proposition with respect to conversational maxims (mostly Quality and Relevance). He declares that the typical case of manipulation is when the proposition or the implicature is false. In line with this, Grice sees that the violation of maxims is committed at the level of ‘what is said’ or ‘what is implicated’. These maxims are discussed one by one in the following subsections.

2.1.2.1.2.2.2.1 Quality maxim violation. The Quality maxim deals with sincerity; thus, a violation is committed when a speaker communicates a piece of information that either he believes it not true (false) or that he has no ‘adequate evidence’ (relevant proofs) on its trustworthiness (Grice, 1991, p. 27). Saussure (2005) describes the following cases as manipulative:

The cases where the proposition (P) is false but assumed to be relevant (true) by the speaker:

- In case the proposition is false and the speaker knows about the falsity of P, then P is a lie. Maillat and Oswald (2009) believe that a lie as a manipulative proposition deals with falsity and insincerity, thus it violates cooperative principles, specifically the conversational maxim ‘Quality’. Allott (2010) confirms the same belief by saying: “lying involves breaking a maxim of truthfulness but covertly” (p. 74), which means that he believes that it is mostly about being insincere. Thus, the violation is committed at the level of Quality, in addition to the covertness aspect. For more clarification, Maillat and Oswald (2009) provide this example: a child who broke a valuable vase. Tending to avoid the parents' punishment, the child tries to be manipulative and opts to be insincere, i.e.: to lie and say ‘I didn’t do it’ in regard to the social environment (if the child knows that someone else could be accused); the act is considered manipulative since the two conditions of intention and the speaker’s goal are present.
- Though, in case the Proposition is false, but it is believed to be true by the speaker. Saussure (2005) believes that the manipulator can rarely be unaware or unconscious of/about the falsity, or at least the suspicion of the statement expressed. So, he qualifies this case as manipulative. In such a case, the speaker communicates a belief that was

transmitted through the ignorance of reality, a lie or a manipulative act, which means the speaker's act is purely persuasive (absence of deceptive intention and personal interests). This can be seen as second-hand, unintentional, or indirect manipulation that falls out of the interest of this study. Consider this example for a better visualisation of this point: when a child is telling another about unicorns and tries to make him/her believe in their existence (telling about his/her belief), since both manipulative intention and speaker's interests are absent; so, it is not a case of manipulation.

N.B.: The idea of 'unicorns' as an example is inspired from Maillat and Oswald's paper (2009), but from another perspective.

Also, consider this example that visualises Saussure's perception; a person trying to convince others about the perfectness (which is false) of a participant in elections. If the speaker believes in the perfectness of this participant and has no deceptive intention, despite the existence of speaker's goal (which is to vote for this participant), the act does not remain manipulative. It is also possible to cancel the speaker's interest by assuming that the speaker is a foreigner (he is not allowed to vote and has no interest in these elections).

- However, in case where the Proposition is known to be false but believed to be true by the speaker, Saussure (2005) judges such a case as "psychological trouble" (p. 123) of the speaker. He sees this case as a violation of the Quality maxim and claims that this case implicates a 'complex notion' incapable of being manipulative. Yet, it is a case where the speaker tends to convince someone else of a belief where no personal interests are going to be achieved, and no deceptive intention is implicated. In fact, it is a case of distinction in beliefs since there are no norms for knowledge and belief. Consequently, it could be simply seen as a case of persuasion, as it is the case for scientists, astronauts, religious groups, and groups of people like survivors.

To show the difference between this case and the previous one, the example of unicorns is differently reconsidered. Consider: a child telling an adult about unicorns (it is somehow known that unicorns do not exist based on the absence of unicorns' skeletons); adults do not believe in the existence of unicorns, while children mostly believe in their existence. As much as the child tries to convince the adult in his/her belief, neither the act remains manipulative in regard to the absence of both manipulative intention and speaker's interests, nor does the speaker suffer from psychiatric troubles.

Another example can be provided in the case of ‘a known belief as false’, taking in consideration that both interlocutors are adults. Consider: a comparison may be conducted in the case of two persons in different settings, trying to convince the other person(s) to embrace their religious beliefs. One of the speakers is a Believer in God (like Muslim, Christian, or Jew), and the other one is an Atheist (nonbeliever, freethinker...). In the case of the believer (a known belief as true), the speaker may be considered to some extent as manipulative since the act is rewarded by God. That is to say, the personal interest is present. However, the Atheist is not considered as manipulative, nor is he suffering from psychiatric troubles, despite the fact that the belief communicated is recognised, accepted, or known by a majority as false, but no personal interest is present.

N.B.: From a neutral point of view, this example does not insinuate that a believer when talking about religion (inviting people to religious beliefs) is manipulative, nor does it imply disrespect to atheists.

To support this vision, the point of distinction in belief was addressed by Allott (2005). He developed this point when dealing with ‘intuitive and reflective beliefs’, following Sperber’s (1982; 1985; 1997) research in anthropology. Allot states:

“Anthropologists face the task of describing *beliefs that people profess but which seem to clash with truths about the world*. For example, as a field anthropologist Sperber was asked to kill a dragon. Assuming dragons don’t exist, what can we say about people who have beliefs about them? One possibility is that *they are simply misinformed*. A second possibility is that *they may have a different sort of belief* about dragons. Someone may believe: It is common knowledge that there are dragons. This is a *reflective belief...* [italics added]” (2005, p. 156).

This quote shows Allott’s perception of ‘belief known as false’, similarly saying ‘beliefs that clash with truths about the world’, where he judges the speaker as simply being ‘misinformed’ or ‘owning a different belief’. He expands the idea by providing the example of ‘Dragons’, that he sceptically does not communicate his (dis)belief in their existence when saying “Assuming dragons don’t exist...”, however, his disbelief slightly appeared in the use of ‘we’ in “what can we say about people who have beliefs about them?” a more neutral subject could be used instead of ‘we’, such as ‘anthropologists, archaeologists, scientists, or linguists’ or simply ‘unbelievers in dragons’ existence’. All that amounts to say that, even though Allott does not believe in the existence of dragons, he sees ‘beliefs known as false’ as a simple reflective belief for some people that cannot be seen as psychiatric. It stands to reason, then, that the attempt to convince with a false belief does not mean, as shared by Sausse (2005), that the expresser is psychiatric.

However, it could simply mean that the expresser is ‘misinformed’ or ‘owning a different belief, as stated by Allott (2005, p. 156). The relevance of this point to the present dissertation lays on the interference of both notions of manipulation and belief as a mode of knowing in evidentiality. It also could be seen as a contribution to the literature on manipulation related to belief, since the earlier mentioned ideas would modestly clarify this blurry relation between belief and manipulation.

Furthermore, Saussure’s visualisation of ‘known belief as false’, mostly expressed by speakers having psychiatric troubles, is exceptional to groups of ‘sects’ like the case of Mrs Kee studied by Festinger, Riecken, and Schachter (1956) (cf. Laurens 2003).

- Moreover, there is another case where the proposition is, in fact, true but recognised or doubted by the speaker; in this case, it leads the addressee to infer a false implicature assumed to be true (Saussure, 2005). It somehow carries the implication of doubt and confusion.

The relevance of this subsection to the present research lays on the implication of the violation of quality maxim within manipulation, especially when dealing with legal discourse. In the following subsection, the Relation maxim is discussed.

2.1.2.1.2.2.2.2 Relation maxim violation. The Relation maxim seeks to make a statement highly relevant to the context (Grice, 1991), that is to say, to make the hearer’s first inference about the intended meaning communicated (Allott, 2010). In the following, some potential cases of violation of relational maxims and occurrence of manipulation are discussed:

- In case the Proposition is relevant and not a violation of the Quality maxim, it is about what the speaker believes and what he wishes to believe... manipulators are involved with self-persuasion, like in positive self-image (Saussure, 2005).
- In case where the proposition is not relevant but, in a certain context, it makes the addressee infer a false implicature as true, where the speaker is aware of the falsity or the uncertainty of the implicature conveyed (Saussure, 2005), Maillat and Oswald (2009) communicate this case as being a case of manipulation. They see that a manipulative proposition can be a plausible justification. Thus, manipulators communicate a probable piece of information, instead of the real one (Relevant), that helps in the conception of their manipulative goals, as agreed on by Saussure (2005), van Dijk (2006), and Maillat and Oswald (2009).

Maillat and Oswald elaborate on this point by sharing this example, as mentioned previously in the case of 'lie' (P is false and recognised as false by the speaker, but communicated as true). The child who broke a valuable vase may adopt a different strategy from lying, which is to pretend to blame someone else (like a dog or a sibling); thus, the parent infers the false implicature that the child did not break the vase (2009).

Saussure (2005) sees, in consideration to Relevance Theory, the plausible justification differently. He perceives the later as a lie, for the reason that the proposition is supposed to be relevant or acceptable with respect to conversational maxims. However, as far as a plausible justification is concerned, it is known as a non-relevant (irrelevant) proposition by the speaker; thus, it remains a lie, according to Saussure (2005).

The relevance of this point to the present study lays on the implication with manipulation through the relevance of the communicated propositions by the interlocutors, namely CEO vs. Congressional members and the Facebook Team vs. the question senders.

Observably, manipulative discourse is mostly studied in regard to Quality and Relevance maxims. Yet, Quantity and Manner maxims were not sufficiently discussed. That is, maybe, because of the belief of researchers in the prevalent violation of these two maxims. In the next subsection, the quantity maxim violation is discussed.

2.1.2.1.2.2.2.3 Quantity maxim violation. The Quantity maxim deals with the amount of information communicated; it is a must to be neither more informative (extraneous) than what is required nor less informative (pretending ignorance) (Grice, 1991). That is to say, the statement expressed should be as informative as the communication/question requires. Saussure (2005) believes that a true statement could be 'manipulatively' expressed by the speaker, as in the case of hiding relevant information (2005, pp. 119-120). That is to say, communicating an incomplete piece of information (insufficient) is a case of manipulation; the hidden information is logically uncommunicated for a specific purpose (speaker's goal). In this vein, Galazinski (2001) categorises acts of deception into two major types: deception by commission versus deception by omission. Since the corpus studied is interrogative, this specific case of omission and commission is probably to be met during the analysis.

Q-implicature is illustrated in the following example, provided by Allott (2001), where a speaker said X while saying Y would have been sufficiently informative. In this case, either Y is false or it is unrecognised by the speaker as true (Allott, 2001). However, when X is less informative, it means that the speaker does not want or intend to be cooperative (to

communicate a sufficient amount of information). Since being over-informative is perceived as an act of cooperativeness by Grice (1991), he expands by recognising that it may cause wastage of time, misguidance, and confusion.

In this case, all instances of vagueness, generalisation of terms, abbreviations, and acronyms are considered as cases of violation of this maxim. And that is exactly what a legal discourse should not deal with.

In addition to Quantity, Manner maxim, as mentioned above, has been less considered by researchers when it comes to manipulation. However, in the following subsection, an overview of where manipulation could interfere with Manner maxim is developed.

2.1.2.1.2.2.2.4 Manner maxim violation. The Manner maxim deals with the way information is communicated; it is to be 'brief and orderly' (Grice, 1991, p. 27). A violation is committed when the information is ambiguous and obscure, agree Allot (2010) and Cutting (2002), and this is one of the important features of manipulative discourse, as stated previously when dealing with fuzziness. A case in which the manner maxim is respected might be 'simplification'.

The relevance of this point to the research lies in the occurrence of ambiguity more than the order, for the reason that the corpus is a set of questions from different people. Consequently, the order is not to be approached.

Concisely, the linguistic mechanisms of manipulation are the linguistic tools used to create confusion and ambiguity in utterances. Those tools are hired to complicate the addressee(s)'s understanding procedure. The deficiency of understanding makes the audiences feel incompetent, so that they do not believe in the deductions or the intuitions their minds develop. Through the feeling of incompetence and, in addition to some social, psychological, and cognitive conditions, the addressee(s) probably believe(s) in cooperativeness and develop confidence towards the speaker. As a result, the addressee(s) could be manipulated. All this to say that social, psychological and cognitive mechanisms are implicated as much as the linguistic mechanism is. These remaining mechanisms are to be divided into the following sections, starting with the social one.

2.1.2.2 The social mechanism. The Social mechanism is the speaker's use of the social environment to design the suitable manipulative strategy for the audience; that relies on group pressure and/or super-competence achievements, mostly, to make the hearer confident in the speaker (Saussure, 2006). It is based on two main factors: communicative goals and social position, respectively, as discussed in the following:

Communicative goals are called by van Dijk (2006) and by Maillat and Oswald 'Speaker's interest' (2009, p. 352). This concept has been studied by many researchers, like van Dijk (2006; 1998; 2015), Rigotti (2005), Saussure (2005), and Schulz (2005). Communicative goals are an important yardstick that the manipulator tries to play on. The speaker tends to make the audience unconsciously believe in and react to the message for his/her own interests (van Dijk, 2006) or to make them infer the obligation of behaving in the service of the speaker's interests without being aware that the speaker hides some relevant information for specific aims (Saussure, 2005). It is worth mentioning that the 'covertness' factor mentioned by Maillat and Oswald (2009) is highly involved with the communicative goals factor, as stated above by Saussure (2005). The speaker may even pretend to be communicating for the hearer's interests.

As for the parameter of Social position, it is named by Maillat and Oswald (2009) 'Social inequality'. It is the imbalance in power and domination that may be in favour of the manipulator to achieve a successful act of manipulation (Maillat & Oswald, 2009); it may also be a matter of belief in the distinction between super-competent and under-competent interlocutors (Saussure, 2005). This point of super/under-competence is foremost discussed as a psychological factor.

The social position of inequality is inevitably taken into consideration by any manipulator to well prepare the manipulative strategy. The 'hierarchical social position', as named by Maillat and Oswald (2009, p. 358), can be exemplified by the relation between: parent and child, professor and pupil, politician and public... However, the absence of social power does not mean the ineffectiveness of manipulation, because in the case of social power equality (e.g., friends) or a case of social power inferiority (e.g., children and parents), this dimension may compromise a successful manipulative act. Yet, in a case of social supremacy, a simple act of persuasion could be sufficient, believe all of Maillat and Oswald (2009) and van Dijk (2006).

Mostly, cases of power abuse are observed when addressing intellectuals (Saussure, 2005). Which means that, in case of intellectual supremacy, the manipulator heads for power abuse (social power).

In the case of the corpus used in this dissertation, the social positions are not prematurely distributed since they should be inferred from the discourse. What is meant by this is that the social power in the event studies has not been clearly mirrored. Thus, the investigation of this factor would be helpful for the validity of the results.

After dealing with the social parameter of manipulation, which deals with both communicative goals and social positions. The succeeding mechanism to be investigated, in the next section, is the Psychological mechanisms.

2.1.2.3 The psychological mechanisms. The literature has drawn attention to various aspects of the psychological basis for manipulation. Although van Dijk (2006) is seemingly margining them in his analysis, he says:

“I limit my analysis to social criteria, and ignore the influence of psychological factors, such as character traits, intelligence, learning, etc. In other words, I am not interested here in what might be a ‘manipulating personality’, or in the specific personal way by which people manipulate others” (2006, p. 362).

It is possible to deduce three probable psychological parameters that van Dijk alludes to: First, ‘manipulating personality’ the existence of which is recognised by Buss et al. (1987, p. 1220) with respect to Christie and Geis's (1970) research. Second, van Dijk sets criteria for a manipulative person in terms of ‘character traits’, ‘intelligence’, and ‘learning’. In a similar context, Laurens (2003), citing Pech and Zagruy (2002), declares that manipulators are able to accomplish this influence in regard to their moral state, intentions, social, and educational levels (Pech & Zagruy, 2002, as cited in Laurens, 2003). Third, there is provision in van Dijk's quote for the existence of specific personal method(s) in manipulating people. Buss et al. (1987) conducted a research on those personal methods called “Manipulative Tactics”. These tactics are countless; thus, Buss et al. investigated “charm, coercion, regression, debasement, reason, and silent” use (1987, p. 1226). These personal methods can be cancelled in the case of undeliberate manipulation.

The phenomenon of undeliberate manipulation is a subject seen from the psychological point of view as a reality. Saussure (2005) admits contradicting psychotics in the belief in undeliberate manipulation by saying: “...I suggest that contrary to psychotics, manipulators are always aware...” (p. 122), and argues that manipulators are consciously producing manipulative discourse by using false and doubtful propositions, and he sees this consciousness as a kind of justification for the use of less informative statements and the oddness of some

interesting parameters, in addition to the use of power abuse. This idea of undeliberate manipulation falls outside the scope of the research, as previously mentioned. Though it contributes to the general perception of manipulation.

The undeliberate manipulation could exist in the case of second-hand manipulation mentioned by van Dijk (2006) as transmitting a manipulative discourse by conviction in its trustworthiness, which calls into question the absence of the manipulative intention.

Intention is the core of communication, according to post-neo Gricean theorists (Maillat & Oswald, 2009), and a fundamental factor in the consideration of a manipulative act. The manipulative intention exists in any act of communication where the addressee is not aware of the 'full consequences' and the 'real intention' planned by the speaker (van Dijk, 2006, p. 360). This implies that the presence of any personalised intention is a condition to consider a simple legitimate act of persuasion an act of manipulation (Dillard & Pfau, 2002, as cited in van Dijk, 2006). That is why, from a speaker-oriented perception, it may be seen as a deliberate deceptive act, whereas the addressee sees the manipulative discourse as a communicative exchange. In such cases, the addressee believes that the speaker/writer is cooperative, and yet s/he tries to explore the interlocutor's intention, which is falsified or hidden within the manipulative discourse (Maillat & Oswald, 2009). Maillat and Oswald (2009) argue that the addressee's captured intention from the speaker's discourse 'crucially mismatches' with the manipulator's (deceptive) intention, which is deliberately covert and meant to be unrecognised. Thus, the covertness concept is mandatorily involved with the intentionality of the speaker in manipulation.

Maillat and Oswald note that van Dijk's conceptualization of manipulation is incomplete since it was speaker-oriented only. However, they insist on the necessity of the addressee's interpretative process, which remains an addressee-oriented perspective (2009). From an addressee-oriented conception, communicative intention, informative intention, and even other relevant propositions may be developed by the hearer when the speaker expresses an 'ostensive-inferential' act of communication (at the explicit and/or implicit levels that is to say a fake or falsified implicature). This case makes the hearer expect relevant information and reduces the inferential processing to a 'lower interpretative coast' (Saussure, 2005, p. 136), in addition to many other uncommunicated (covert) intentions that can be detected only through the psychological status and tools.

Besides, the doubt about the manipulative intention may weaken and neutralise manipulation's effect on the target population (Maillat & Oswald, 2009, p. 353); Saussure (2005) shares the

same belief, where he emphasises the covertness of the speaker's manipulative intention as an influential and decisive factor. This doubt about the speaker's intention remains the doubt about the cooperativeness of the speaker/writer, which stimulates the addressee's mental processing of the information, and the whole act of communication remains an 'undue path' for the addressee (Rigotti, 2005, as cited in Maillat & Oswald, 2009). In other words, the addressee's mental information processing should be the main target path to be studied. That is why the manipulator tends to evaluate or investigate the manipulated group's cognitive level; this study allows to conclude a cognitive aspect. All this to say that in addition to the previously mentioned factors, also cognitive factor is implicated in manipulation. The cognitive factor is seen in the following subsection, untitled Cognitive mechanism.

2.1.2.4 Cognitive mechanisms. Concerning the cognitive mechanisms of manipulation, what is at stake is mostly about creating understanding problems. The later may not be achieved unless the manipulator is somehow aware of the addressees and their background knowledge (i.e., the manipulator is undoubtedly aware of the background knowledge context of the discourse). Thus, the manipulator opts to have an idea about the cognitive esteem of the addressee.

The cognitive esteem refers to the knowledge or estimation about the interlocutors' cognitive level and background about the topic discussed. It is the current addition by Maillat and Oswald's research (2009), inspired and developed from the paper of Saussure (2005), called 'Cognitive optimism'. They consider this factor as an important tool in the manipulative procedure to (mis)lead the addressee. It guarantees the addressee's narrow accessibility to some contextual assumptions, since the manipulator attempts to weaken the interlocutor, he would choose a context or a text that is clearly hard to cognitively be investigated by the interlocutor. van Dijk (2003, 2006) commented on that by saying that it is the act of 'over coding'. This act of over coding needs an 'over decoding' or 'over analysis' of the given utterance (Maillat & Oswald, 2009). In other words, it needs a higher level of cognitive competence to decode (understand) the message.

The concept of cognitive optimism has formerly been discussed by Cara, Girotto and Sperber (1995), where they assert that "...people are nearly-incorrigible. They take for granted that their spontaneous cognitive processes are highly reliable, and the output of these processes does not need rechecking." (as cited in Maillat & Oswald, 2009, p. 365).

Maillat and Oswald (2009) assert in the light of the later point that the mechanism of information processing is unfairly used by manipulators; thus, the manipulator aims to divert

the addressee's attention from the relevant information by formulating adequate information (a lie or falsified piece of information) to the questionable matter. In other words, the manipulator restricts the addressee's access to some contextual assumptions (limits the addressee's accessibility to the deliberately covert information and intention). Since the aspect of cognition in manipulation is identified as the lack of knowledge concerning the manipulator's real aim and intention, which causes the success of the manipulative act (Wodak, 1987, as cited in Maillat & Oswald, 2009). This is to say that the manipulator opts for a creation of any difficulty to avoid the addressee's access or inference about the real aim and intention of the manipulator. The failure of manipulation may be related to the manipulator's 'unpredictability' of the manipulated group's knowledge about the context or the underestimation of 'hearer's veracity checking' (Maillat & Oswald, 2009). Veracity checking is a must, says Chilton (2011), where he notes that believing in people's cooperativeness is acceptable, and veracity checking is an instinctive phenomenon that could be easily affected under social and psychological circumstances.

The relevance of this subsection to the research is related to the distinction between the interlocutors' cognitive capacities. Furthermore, one of the main points that should not be neglected when dealing with manipulation is the problems of understanding. This later is seen in the next subsection.

2.1.2.4.1 Problems of understanding. To cause understanding problems, it is quite important to convince the addressee of the good/safe intention of the speaker. Saussure believes that it is mainly about intention recognition; he states: "...all the strategies lead the hearer to problems of understanding, i.e., problems in the process of retrieving a clear informative intention on the part of the speaker" (2005, p. 113). This scholar considers 'all' manipulative strategies, not 'some' nor 'majority' of manipulative strategies, to lead the addressee to perceive the speaker's intention as informative; which means that it is about triggering a belief in the cooperativeness of the speaker. In other words, the total strategies of manipulation work on causing problems of understanding with the aim of misinterpreting the deceptive intention of the speaker into an informative (not deceptive) intention.

Relevantly to the research, the following tactics shared by Saussure (2005) maybe hired in the analytical chapter four. Saussure sheds light on two main assumptions concerning the cognitive tactics that may be used by a manipulator to create reasoning obstacles:

1- The ‘trouble-and-resolution’ device, as named by Saussure, is ‘a central mechanism’ of discursive manipulation. It is the idea of constructing some ‘trouble’ in the understanding system, as well as giving ‘ready-made resolutions’ to the constructed trouble (Saussure, 2005). The manipulator tends even to make the addressees develop the illusion that the solution was theirs. Since Saussure does not emphasise or mention the order of the two actions, it is possible that the manipulator presents some resolutions as futuristic situations (a kind of temptation), then faces the addressees with the trouble if the resolutions (precautions) are not taken in time (a kind of pressure). Since this point could only be investigated through deep knowledge about the discursive situation and the relationship between interlocutors. This may fall out of the interest of this paper, which investigates the interlocutors’ relations and discursive situation throughout the corpus under study. Furthermore, it focuses on specific linguistic units, namely affect and evidential markers.

2- Fine-grained grounding procedure: this tactic is fundamentally based on the implementation of belief (Saussure, 2005). It is about contributing to the background knowledge context of the addressees. This contribution consists of changing a belief at the earlier stage of communication (Saussure, 2005) or adding a thought or verity (false or half true) to communicate the manipulative discourse. Unlike the first tactic, this tactic is clearly relevant to the research perception of interference of manipulation and belief.

By deeply looking at understanding problems, the information processing should be taken into consideration. This is the point that is developed in the following subsection.

2.1.2.4.2 Information processing. In both Saussure’s (2005) and van Dijk’s (2006) papers, the information processing in mind is reviewed. Saussure declares the existence of a Source-Tagging Device (that could be abbreviated to STD), which is a tool of investigation of the communicated information, while van Dijk discusses Short Term Memory and Long Term Memory (that he abbreviates to STM and LTM), those parts of the brain are supposed to interpret the received message and stock the inferred information, as explained in the following.

It seems logical to assume that an act of communication (speech or text) passes through the following steps to be elaborated from a linguistic message (verbal or non-verbal) to a piece of information:

1st step: Message decoding: this process happens at the level of STM (Short Term Memory), in which the words, clauses, sentences, utterances, photos, gestures, facial expressions... are to be interpreted (van Dijk, 2006). This means that, after the addressee receives a message, or at the

same time as the message is being received, the STM treats the message. It (STM) translates the components of the message (whatever the message is) into an image, idea... The translation happens differently by people because it depends on the personal dictionary (personal background knowledge). The treatment occurs at all of phonetic, phonological, morphological, syntactic, and lexical levels (van Dijk, 2006). In addition, conceptual interpretation of each component of the message, according to Relevance Theory, pays attention to three different levels of meaning: linguistic, logical, and encyclopaedic levels (Allott, 2005).

All these treatments are undertaken with the aim of better understanding (van Dijk, 2006). The choice of the suitable meaning to the context is done by maximising the relevance of the message communicated to the topic of interaction (Allott, 2005). This is to say that this cognitive device (STM) chooses the most relevant interpretation from a set of potential interpretations; differently saying, the brain chooses the meaning that is expected to be meant by the speaker regarding the context and communicative situation and rejects the other potential meanings that could be meant by the speaker.

This leads to the inference that both Manner and Relation maxims are examined at this stage of information processing. So, in a case of discursive manipulation, the processing of STM is interrupted by the use of misused concepts, presuppositions, abbreviations, acronyms, which makes the addressee doubt its competence in decoding the message, or accessing a narrowed topic of interaction, which means that some information (explicatures/implicatures) are completely inaccessible to or unpredictable by the addressee.

2nd step: information veracity checking: this procedure occurs at the level of the Rational Device called STD (Source-Tagging Device), at which the information reliability is analysed in regard to its (information's) source (Saussure, 2005). This is to say, the STD works on investigating the credibility of the message received with regard to the source's trustworthiness. This investigation is done at the level of 'various modal and evidential expressions' says Saussure (2005, p. 131). It depends on the interlocutor's credibility and the communicative situation. Furthermore, the speaker's position (social and cognitive) and communicative situation, in addition to the communicated knowledge and source of knowledge, reflect the speaker's credibility. Simply put, the match between the speaker's image, believed intentions, communicative situation, and the shared knowledge regarding the needs of the situation would represent the speaker's credibility that make him/her pass the veracity checking device as sincere or truthful.

So, the veracity checking device is basically based on speaker's image and communicative situation, and the source of knowledge. Yet, apart from communicative settings, the other two aspects could be investigated through linguistic interactions in the discourse. It is assumed that the speaker's status could be investigated throughout affect expressions and source of knowledge shared by the speaker throughout the linguistic features evidential markers (expression). And this is what this research is working on proving in the legal corpus used.

Seemingly, at this level of information processing, the interpreted message (primary information) is checked and qualified as accepted, rejected or even still in process (cf. Saussure, 2005).

Veracity checking device, also called Rational device, could be blocked. Rational device blocking, Saussure (2005) assumes, is a strategy used by the manipulator to take control of installing or modifying beliefs. It is mostly about blocking 'truth', 'likeliness', 'acceptability', and 'consistency' checking. This scholar insists on the importance of initially interrupting manipulative intention. However, it is possible to see it as expressing a certain intention and using this strategy to convince the manipulated of the alleged intention.

In the case of discursive manipulation, the abuse of veracity checking procedure happens at the same time as the message decoding procedure, claims Saussure (2006). He also believes that the deception mostly occurs at the level of intention rather than the communicated information. This could be a plausible myth, since it is quite rare (to not say impossible) to own deceptive intentions and communicate sincere, informative, clear, and relevant statements and information. However, the opposite does not work in all cases. That is to say it is possible to deal with cases where the interlocutor has good intentions and communicates false statements such as 'White lie' and 'undeliberate manipulation' as seen in the previously mentioned example of 'talking about a participant in elections as a belief in the perfectness of this participant'.

3rd step: Information Stocking: this operation is fulfilled at the level of LTM (Long Term Memory), where the meaning communicated by the message and checked by STD is drawn out and organised to be kept in mind at the episodic memory, with respect to the fact that the elements of background knowledge that are used in the treatment of the information are for sure stocked at this level and also that the personal dictionary (lexis) as conceptual information (a part of the background knowledge) is kept at the level of LTM. Saussure clearly communicates this idea in regard to the episodic memory as a part of the LTM; he says:

“In episodic memory, the understanding of situated text and talk is thus related to more complete models of experiences. Understanding is not merely associating meanings to words, sentences or discourses, but constructing mental models in episodic memory, including our own personal opinions and emotions associated with an event we hear or read about. It is this mental model that is the basis of our future memories, as well as the basis of further learning, such as the acquisition of experience-based knowledge, attitudes and ideologies” (2005, p. 367).

Episodic memory can also be employed as a reminder or a reference to events that help change personal and social beliefs and behaviours. Van Dijk (2006) believes that episodic memory is essentially helpful in ‘manipulating the social cognition’. It is used to modulate audience perception of an event; it makes the audience get a flash back to a similar event (or allegedly perceived as a similar event) to make them adopt a certain belief, behave, or avoid performing in a certain way. This example must clarify the point: The Algerian population did not violently embrace the Arab Spring wave, for the reason that the Algerian government deeply and repeatedly reminded Algerians of the Black Decade, a ten-years’ period of a kind of civil war between military forces and terrorists. The Algerian government used the media, mainly showing documentaries and movies on television about that period and sharing photos of crimes and corpses on the social media. All that was meant to spread this kind of recall which was perceived as a threat by Algerians. This act (with no regard to its appropriateness) was manipulative.

As mentioned before, episodic memory can be used to influence personal or individual behaviour; the simplest example is blackmail used by parents to force their children to behave or accomplish a task. For example: a mother saying to her child: “look at your dish! I think it is going to be the same as Monday’s dinner”, where on the last or a certain Monday, the child did not finish his part of dinner, and as a punishment, he had no dessert, or he got sick the day after, or he had a nightmare. So, the child behaves according to the dictated behaviour (finishes his part of dinner) under blackmail, and the mother remains manipulative.

This long research on manipulation has been conducted with the aim of first making the reader familiar with the perception of manipulation followed in this research. Second, highlight the speaker’s image implication within manipulation. Third, negotiate the relation between belief, knowledge and manipulation. And finally, locating interference between affect, evidentials, and manipulation. Before getting deeper into this interference, it seems mandatory for the whole research on manipulation to deal with types of manipulation.

2.1.3 Types of Manipulation

Van Dijk (2006) believes that the addressee's mind may be more successfully deceived by some strategies than others; which is the manipulator's choice to opt for a strategy rather than another in regard to the communicative environment, interlocutor's goals, capacities, and perception of the environment and audience. This leads to the development of the belief that manipulation indisputably has various types. Akopova (2013) enumerates the types of manipulation constructed on linguistic and psychological grounds; these types are established with respect to the character of subject-object interaction, the awareness and type of linguistic action (speech act produced), person or group oriented manipulative act, manipulated responsive reaction, and mainly the target mental sphere. This author's typology runs as follows:

Manipulation types differentiate according to the character of 'subject-object interaction' into:

- Direct: the interlocutor is explicitly presenting demands to the addressees, such as in 'declarative and interrogative utterances'. That is to say that the manipulator addresses the target person/group to be manipulated directly in a communication.
- Indirect: the subject manipulates the environment rather than the addressee. This type is used by the interlocutor to keep the manipulative intention deeply covert (Akopova, 2013). Similarly, this type is seen by Barnhill (2014) a 'direct manipulation' is focused on a person, whereas the indirect manipulation is the 'manipulation of the situation'.

Manipulation types, according to awareness of linguistic action, sees Akopova (2013) as varying into:

- Intentional linguistic manipulation: the interlocutor wants to achieve a specific reaction from the addressee.
- Non-intentional linguistic manipulation: is unintentional manipulation applied by the interlocutor where no reaction is expected from the addressee.

Manipulation types are distinguished, according to the type of linguistic action, which means it is based on the speech act produced by the interlocutor, and vary into:

- Social manipulation is defined by Akopova (2013) as: "social non-informational speech acts with clichés in the form of greetings, oaths, and prayers" (p. 80).
- Volitional manipulation is where speech acts go along with the interlocutor's willingness, structured in the form of instructions, orders, demands, rejections, advice, etc. (Akopova, 2013).

- Informational and estimative manipulation is where speech acts deal with interpersonal relationships to be moral, legal, and academic in the form of reprobation, compliments, accusations, insults, threats, etc. (Akopova, 2013).

Manipulation types differentiate according to the manipulator's orientation towards a manipulated person or group, run into:

- Person-oriented linguistic manipulation is directed towards a specific addressee. It is mostly where the manipulator makes this target person believe being in a certain position to develop the feeling of obligation to react accordingly, believes Akopova (2013).
- Society-oriented manipulation is where the manipulator establishes a generalised image of a whole group and targets a set of people (Akopova, 2013).

Manipulated (person/group) responsive reaction visualisation may also help in distinguishing other types of manipulation. This is to say that these types are classified, with regard to the perlocutionary act, insists Akopova (2013), into:

- Evaluative reaction: appears in the transformation in the relation between the interlocutors (manipulator and manipulated).
- Emotional reaction: is felt in a development of general emotional mood. This type is recognised by Barnhill (2014) as 'Manipulation that Targets Emotions'.
- Rational reaction: is about the establishment of a new or modified belief as a shift in the addressee's perception. This type is seen by Barnhill (2014) as the 'Manipulation that Targets Beliefs'.

As for linguistic manipulation categorization according to the mental targeted sphere, it is classified by Barnhill (2014, p. 55) into "Manipulative Emotional Appeals vs. Non-Manipulative Emotional Appeals". Whereas, Akopova (2013) distinguishes it into:

- Ration manipulation: is where the speaker affects the rational sphere of the addressee. It is about influencing the listener's consciousness by using convincing facts and arguments. Similarly, Barnhill (2014) recognises this type as 'Manipulating the Mental States'. This type is divided by Akopova (2013) into direct and indirect rational manipulation: Direct rational manipulation directly targets the rational side of the addressee, like an "original appeal". Though, Indirect rational manipulation targets indirectly the rational side through various faults in logical thinking through the creation of figurativeness (Akopova, 2013).
- Emotional manipulation: is where an emotional reaction is aimed at being achieved to stimulate the audience to behave in a certain way. To succeed in this kind of manipulation,

the speaker expresses some emotions, mostly fake or excessively expressed ones. (Akopova, 2013).

Expressed differently, the emotional aspect is treated as a psychological tool used to exercise influence. Manipulation can be divided accordingly as a hierarchical reflection of ‘communicative skill in language usage’ (p. 81). Akopova (2013) classifies these into:

- Non-productive manipulation, moored at the bottom of the hierarchy, works with the manipulator’s desire by psychologically discomforting the addressee(s). It is also seen by Akopova as a linguistic action that aims to apply supremacy by unveiling the addressee’s imperfection and inferiority, which may stimulate the targeted person/group’s submission. This type can be seen as intimidation or blackmail.
- Productive manipulation is when the manipulator becomes a ‘voluntary donor’ and situates the listener in the position of superiority and social welfare. Compliments and flattery are the easiest means of manipulation.
- Actualizing communication fixed at the top of the hierarchy, is ‘the optimal alternative of effective communication’, where the speaker grants respect to the addressee’s individuality and openness towards manipulative techniques. She declares that:
“Actualizing communication is based upon desire to arise the listener’s sympathy. It should be noted that mastering of actualizing communication is not an easy task. Thus, in everyday life manipulative forms are predominant” (p. 81)

The implication of emotions with manipulation arises from the consideration of the emotional expressions in a discourse that are mostly called affect markers. In the following, the implication of affect markers within manipulation is reconsidered.

2.1.4 Manipulation and Affect

In any kind of discourse, the interlocutor’s expressed or shared emotions with the addressees (be they fake or real) are transmitted through emotional devices like prosody, intonation, attitude of the speaker, and/or through the propositional content of utterances (concepts or affective markers) (Saussure, 2005). Saussure insists on the fact that the moral values propositions are easily transmitted through a manipulative discourse, because of their instability. Thus, the addressee tends to check the accessibility of the moral values regarding the ethical and cultural (socio-cultural) values, and he notes that the adoption and construction of new beliefs in the cognitive environment of the addressee is less obstructed when addressing critical (weakened) socio-cultural values, like democracy, equality, and rights.

Furthermore, he notes, as already mentioned, that “The more confident the hearer is, the less critically he thinks, and the more efficiently the manipulator is likely to achieve his persuasive goal”. (2005, p. 131), which means that the cognitive aspect of information processing is related to psychological factors. Akopova (2013) also agrees with this point, as previously exemplified: flattery is an efficient tool to fertilise the addressee’s mind. In other words, emotional games may affect the rational side of the addressee. This point stimulates the thinking about the notion of ‘emotional intelligence’, which is seen by Mayer and Salovey (1990) as ‘a type of social intelligence’ (as cited in Salovey & Mayer, 1993, p. 433). Clearly, this is due to the fact that it is “the ability to understand and manage men and women, boys and girls--to act wisely in human relations” (Thorndike, 1920, as cited in Mayor & Salovey, 1993, p. 435). A question may be evoked by this quote, concerning the phrase ‘act wisely’, - to act wisely in the interest of whom? – if it is to act wisely in the interest of the society as a whole, so it is about social intelligence. However, if it is about to act in the interest of a certain group or person, so it is about manipulation in cooperation with intentionality. Mayer and Salovey (1993) differentiated emotional intelligence from social and general intelligence by stating that it is involved in “the manipulation of emotions and emotional content” (p. 436). They claim that:

“The scope of emotional intelligence includes the verbal and nonverbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilisation of emotional content in problem solving” (p. 433)

This is to shed light on the fact that verbal expressions of emotions are used in the control of a person's and a group’s emotions, and that these expressions are hired in handling problems. As a result, affect markers (expressions) can be manipulatively used in discourse, mostly to arouse the addressee’s confidence in the interlocutor and/or to put the addressee in the suitable position to be manipulated. And this is one of the hypotheses of this research.

Yet, affect expressions alone would not be sufficient for the investigation of a manipulative strategy as much as being investigated with evidentials. This is why the next subsection briefly reviews the relationship between manipulation and evidentiality.

2.1.5 Manipulation and Evidentiality

As mentioned above, the reliability of statements and its source is evaluated at the level of the STD (Source-Tagging Device). The reliability of a discourse is mirrored through the use of ‘various modal and evidential expressions grammaticalized or lexicalized’ (Saussure, 2005, p. 131). Consequently, evidentiality must be implicated in manipulation (cf. Aikhenvald, 2004).

In this section, manipulation is defined and its mechanisms are highlighted. Also, types of manipulation are discussed. Furthermore, the relationship between manipulation and both affect and evidentiality is briefed, respectively. In the following, the second part of the ongoing chapter is developed to deal with Affect as a notion and its markers' categories.

2.2 Research on Affect

In this section of the chapter, Affect is introduced as a linguistic aspect, and categories of affect markers are listed.

2.2.1 Definition of Affect

Affect deals with the personal attitudes specifically concerned with the emotional side, feelings, moods, and general expressions (Ochs and Schieffelin, 1989, as cited in Biber and Finegan, 1989). Similarly, Precht (2003) perceives affect as the emotional attitudinal expression of the speaker, writer, or someone's emotional status. The following example is provided by White (2011, p. 16):

"I am disappointed and ashamed that two of our most admired and respected sportsmen could behave in such a manner. To play for your country is an honour and a privilege, not a right. (The West Australian – 11/12/98: 12, letter to the editor, Jennifer Black, Riverdale)"

In this example, affect markers are underlined: the first and second markers express the writer's emotional status whereas the third and fourth ones represent a third party's emotional worth (evaluation). This is to say that affect markers can be categorised. In the following subsection, affect markers categories are exposed.

2.2.2 Affect Marker Categories

Biber and Finegan (1989) distinguish affect markers as positive and negative affect markers, correspondingly, according to the semantic meaning of the marker. White (2011) based his classification on Martin's (1997; 2000) research on the appraisal framework and sets six norms for the classification. The norms are briefed below, as stated by White (2011):

1. Scaled intensity of feelings, like in 'dislike < hate < detest' or 'like < love < adore'.
2. Cultural perception of the feeling as positive ('enjoyable') or negative ('unenjoyable').
3. The type of feelings is also a norm that is distinguished to 'un/happiness', 'in/security' and 'dis/satisfaction':
 - The un/happiness type is where the feelings are 'affairs of the heart'. Like in I am happy/ in love/ sad/ angry/ mad/ depressed...

- The in/security type deals with feelings expressing social comfort (“ecosocial well-being”). Like in I fear/ stress/ trust/ worry... or I am assured/ confident/ anxious/ nervous...
 - The dis/satisfaction type deals with feelings representing the purchase of aims (‘telos’), like in I am curious/ pleasant/ bored/ satisfied/ respected/ honoured...
4. Internal or external emotional state where the expression covers the behavioural action (‘paralinguistic’) or mental state (‘extralinguistic’); like in the example provided by White (2011, p. 22):
- “She broke down crying”. (behavioural action)
 - “She was distraught”. (mental state)
5. The stimulus of the feelings, i.e., the reason that provokes the emotional state, can be a reaction to a specific situation or a mood. Like in:
- The presence of his friends motivates him. (reaction)
 - He’s enthusiastic. (mood)
6. Respectively to the previous norm, this norm is based on the existence (‘realis’) and non-existence (‘irrealis’) of the stimulus of feelings. This example, provided by White (2011, p. 22), must clarify the point:
- “I’m upset by what she said”. (realis)
 - “I fear what she might say”. (irrealis)

It is worth noting that some categories (mainly the first, second, and third) deal with the semantic meaning of the affect marker used, while others (mainly the fourth, fifth, and sixth) deal with the pragmatic meaning (in context).

These norms of classification are used with the aim of constructing a matrix to help in analysing the affect markers used in the corpus studied. Through this classification, it is possible to position the speaker’s emotional status, to recognise the speaker’s perception of others, and to describe the speaker’s choice accordingly. It is important to refer to the fact that those studied markers are explicitly used with the discourse, which means that they can be allegedly used with the aim of deceiving the interlocutors. Thus, some affect indicators can be found implicit in verbs and nouns. This is to say, some of the non-explicit emotional status of the speaker or others can be found in the text (implicit affect markers). Nonetheless, this does not mean that the implicit affect markers are not deceptive.

The previously mentioned point is the last point dealt with in the second part of the ongoing chapter. Thus, as mentioned earlier, the next part of this chapter considers the research on Evidentiality and evidentials.

2.3 Research on Evidentiality

In this part of the chapter, evidentiality as one of the two fundamental systems dealing with the linguistic expression of attitude, in addition to affect (Biber & Finegan, 1989) is introduced. This research is mostly interested in the evidential markers and their semantic and pragmatic functions in an utterance. It is therefore important to deal with the background and the definition of evidentiality to come up with a classification of evidential markers and then to extract a table of evidentials with their functions. Thus, to commence the research on evidentiality, the first point to be highlighted is the background to evidentiality.

2.3.1 Background to Evidentiality

The term "evidentiality" was introduced by Franz Boas in 1947 in descriptive analysis. He described a set of suffixes that reflect the speaker's source of knowledge and certainty about the knowledge expressed (Boas, 1947, as cited in Jakobson, 1986, as cited in Dendale & Tasmowski, 2001), which were referred to as "Suffixes expressing subjective relation... those expressing subjective knowledge" (Boas, 1911-1971, as cited in Jakobson, 1986, as cited in Mushin, 2001, p. 17). That is to say, evidentiality was discovered as being a purely morphological aspect of language, where evidential markers consist of morphemes, suffixes, minor grammatical units that express the personal knowledge, as pointed out by Mushin (2001).

By the early eighties, evidentiality had evolved from a theory to a productive linguistics research area (Dendale & Tasmowski, 2001). The first conference discussing this issue was in Berkeley, in 1981, which gave birth to Chafe and Nichols's (1986) published work, named "Evidentiality: The Linguistic Coding of Epistemology" (Dendale & Tasmowski, 2001). This work marked the emergence of evidentiality in Linguistics, where it has been perceived as a typological issue in grammaticalization studies, syntax and cognitive linguistics by Mushin (2001), and pragmatics consideration by Faller (2002). Furthermore, other researchers see evidentiality as a semantic category that is performed by the use of grammatical or lexical units. For instance, Floyd (1993) used the term 'evidentiality' in the study of grammaticalized patterns (paradigms) in the Quechua language (Mushin, 2001).

At the sixth International Pragmatics Conference in Reims, in 1998, seven selected papers on evidentiality were presented by the Journal of Pragmatics (Dendale & Tasmowski,

2001, p. 340). Then, the focus of studies of evidentiality has shifted from semantic aspects to pragmatic functions (Fetzer & Oishi, 2014). Biber and Finegan (1989) used the term 'evidentiality' to refer to some 'epistemic markers' in the English language (Mushin, 2001).

Evidentiality may also be seen as a deictic category, since evidential markers express indexical functions that cause a shift in discourse perspectives and allow the interlocutors to detect the status of information with respect to the speaker's attitude (Mushin, 2001, pp. 33-34).

The background of evidentiality has somehow given an idea about the notion of evidentiality. However, the next section clearly defines evidentiality with respect to many researchers.

2.3.2 Definitions of Evidentiality

Evidentiality, once adopted as "M[m]arking one's information source indicates how one learnt something [ibid]" (Aikhenwald, 2004, p. 1); it "...is the grammatical and/or lexical codification of the source of knowledge" (Yildiz, 2018, p. 9). An example of this phenomenon is provided by Lee (1959) from the Wintu language:

"The Wintu never say it is bread. They say, 'It looks-to-me bread' or 'It feels-to-me bread' or 'I-have-heard-it-to-be bread' or 'I-infer-from-evidence-that-it-is-bread' or 'I-think-it-to-be bread', or, vaguely and timelessly, 'according-to-my-experience-be bread'" (Lee, 1959, as cited in Dendale & Tasmowski, 2001, p. 339).

This example shows how the source of knowledge is expressed in the Wintu language and sheds light on the phenomenon of evidentiality. However, many researchers have built on this phenomenon to gather the epistemic aspect in the definition. Dendale and Tasmowski (2001) claim that one of the major problems with evidentiality is to draw the borders in its relationship with epistemicity (mainly epistemic modality). In this regard, Mushin (2001) agrees with Chafe (1986) on defining evidentiality as being divided into two paths: A 'Narrow' definition that considers evidentiality as a source of information with a slight indication about the relation between the speaker and the information (epistemological relationship) (Mushin, 2001). In the same path, Aikhenvald (2005) states that it is "the way in which the information was acquired, without necessarily relating to the degree of speaker's certainty concerning the statement or whether it is true or not" (p. 3); to this effect, Aikhenvald believes that it is about reflecting the source and the method by which the information is learned with no reference to the interlocutor's certainty and reliability. Dendale and Tasmowski (2001) simply identify the narrow sense of evidentiality as the 'reference to sources of information' (p. 340). Though, the 'broad' definition considers evidentiality as an attitude towards knowledge, which means that

evidentials are the same as some epistemic modals that transmit the speaker's attitude and source of information type, that Palmer (1986) and Willett (1988) consider as evidentiality markers (Mushin, 2001). Palmer (1986) identifies epistemic modals as being all 'modal systems' that denote the speaker's degree of commitment towards the information expressed (Mushin, 2001). In the same vein, Dendale and Tasmowski (2001) state that "references to sources of information have been linked closely to attitudes about the epistemic status of information, because the linguistic markers encoding these two semantic domains are often the same" (p. 340). They argue that both Boas (1911) and Sapir (1921) use evidentiality in the broad sense, which means, they associate the "reference to source of information ... with the reference to certainty knowledge [ibid]" (Sapir, 1921, as cited in Jacobsen, 1988, as cited in Dendale & Tasmowski, 2001, p. 340).

Biber and Finegan (1989) share Chafe's (1986) belief that evidentiality is the expression of attitude towards information, the mode of knowing, and the reliability of the information. In turn, Aikhenvald (2007) believes that both the source of information and the speaker's attitudes towards the information are in association with the 'assertivity' and authority markers of the speaker. Pusch (2007) has shown the speaker's assertion markers relation with the meanings of the evidential expressions, specifically the mode of knowing in the Gascony Occitan language, and qualified the knot between assertivity and evidentiality as 'enunciative particles' in this language (Pusch, 2007, as cited in Aikhenvald, 2007).

Triki (2022) specifies that "evidentiality investigates the traces in the utterance of the speaker's ostensive degree of knowledge as inferred by the analyst" (p. 1). Then, by citing Aronson (1967), Triki expands "The pragmatic function of encoding the speaker's attitude to the narrated event as well as speaker's confidence and status" (Aronson, 1967, as cited in Triki, 2022, p. 2). This means, evidentiality is the analysis of evidence on a claimed extent of familiarity with something, someone or an event that implicates the speaker's attitude and shows the status and confidence of the later. Pragmatic functions might be considered as the intersection of evidentiality and epistemic modality (Fetzer & Oishi, 2014), and that tense and aspect markers may be considered as the point of the intersection. While the distinction between Evidentiality and Epistemicity is morpho-syntactic (p. 325), Cornillie sees the functional side of evidentiality as a universal concern for all languages. Despite the differences between grammatical and lexical evidentiality that he qualifies as 'discrimination' (Cornillie, 2009), both Aikhenvald (2007) and Fetzer and Oishi (2014) agree.

Evidentiality was distinguished by Fetzer and Oishi (2014) according to the obligation of the presence of evidential markers in languages. They arrive at dividing languages into two main categories: grammatical and functional. The grammatical category is the category of languages where the coding of evidentiality is an obligation (systematically used). Unlike, the functional category of languages, where the coding of evidentiality is optional, it indicates the epistemic status, modal, or perception to represent a speech act (Fetzer & Oishi, 2014).

The optional coding of evidentiality is constructed by an open set of linguistic tools that are explicitly or implicitly communicated: Explicitly by expressing the source of information, like in quoting a source like ‘by googling...’ or ‘the white house declares...’. And, implicitly, by referring to the source of information using conversational implicatures, ‘indexing’ like in expressing modal verbs to indicate reasoning (Fetzer & Oishi, 2014). This is to say that when dealing with languages of optional coding, evidentiality is believed to be a pragmatic presupposition in discourse where the Gricean Principle of Cooperation and both conversational maxims and implicature interact correspondingly to the communicative requirements (Fetzer and Oishi, 2014).

In this regard, Carretero and Zamorano-Mansilla (2017) share that functional-conceptual research must clarify that, in many languages of optional or functional coding of evidentiality (particularly English), expressions, clauses, or utterances of no-evidential meaning echo an evidential function in discourse like ‘records were kept...’.

In this research, evidentiality is seen from its broad sense, since in the English language the coding of evidentiality is purely optional, that means that evidentiality is taken as the speaker’s random or intentional, and explicit and/or implicit choice of expressions of source of knowledge, attitude, and commitment towards the information expressed. The used linguistic tools (markers) of evidentiality are called ‘Evidentials’, and are presented in the following section.

2.3.3 Evidentials

In this section, evidentials are defined. Firstly, their emergence as a term and a notion is reviewed. Then, their perception is clarified with respect to the ‘narrow’ and ‘broad’ definitions of evidentiality and to the obligation of use in languages. After that, the most contributing part to the research is the classifications of evidentials with respect to many researchers, where their markers are tabulated. All this is with a view to reaching a suitable and rich taxonomy to take into consideration in the investigation of the data selected for the research.

2.3.3.1 Definition of evidentials. Evidentials are morphemes, words, phrases, or expressions used in utterances to indicate the source of knowledge and its mode or to indicate the attitude towards knowledge and its source (Mushin, 2001). The term ‘evidential’ was used for the first time by Jakobson in 1957 and recognised by the mid-60s (Jakobsen, 1986, as cited in Aikhenvald, 2004). It is worth mentioning that one of the first linguists who has discussed evidentials meanings is the French linguist Lazard (1957) as being ‘l’inférenciel’ (Aikhenvald, 2007).

However, the notion of ‘evidentials’ was firstly highlighted in the publication edited by Boas (1911), where Goddard notes that “certain suffixes are used to show by which of the senses the fact stated was observed, or whether it was inferred from evidence” (Boas, 1911, as cited in Yildiz, 2018, p. 11). In quite a similar context, Sapir (1921) notes the existence of some expressions that reflect “the source or nature of the speaker's knowledge” (Sapir, 1921, as cited in Dendale & Tasmowski, 2001, p. 340). These two definitions reflect a distinction in perception of evidentials. Boas’s perception indicates ‘the senses’, ‘evidence’, and the way the information is adopted; however, Sapir’s perception conveys the ‘source or nature’ of the claimed information by the speaker. That is what Mushin (2001) points out by claiming that the definition of evidentials is quite confusing because of the indeterminacy of ‘evidentiality’. This is why this scholar shares Chafe’s (1986) division of evidentials.

In regard to the ‘narrow’ definition of evidentiality, evidentials are the indicators in a discourse of how the speaker got or knew a certain knowledge (Mishin, 2001), which is in tandem with Sapir’s (1921) perception. In the same vein, Jakobson (1957) defines evidentials as being the claimed source of knowledge while telling about an event (Jakobson, 1957, as cited in Mushin, 2001). In regard to the ‘broad’ definition of evidentiality, evidentials are the same as some epistemic modals that transmit the speaker’s attitude and source of information type, that Palmer (1986) and Willett (1988) consider as evidentiality markers (Mushin, 2001). Palmer (1986) identifies epistemic modals as being all ‘modal systems’ that mark the speaker’s commitment degree towards the information expressed (as cited in Mushin, 2001). This vision of evidentials is evident in Boas’s (1911) definition, where subjectivity is reflected in “... the fact stated was observed, or ... inferred from evidence” (as cited in Yildiz, 2018, p. 11), which means that the speaker is implicated in the expression of evidentials.

Fetzer and Oishi (2014) classify evidentials into two groups, according to language demands: E1 (evidentiality 1) languages, where evidentiality is a necessity in the language.

Evidentials are a set of over-coded morpho-syntactic markers to mark a visual, auditory, audiovisual, sensory, reported, or referred evidence (Boas, 1911, as cited in Fetzer & Oishi, 2014); these markers are mostly “closed class, generally unmodifiable, often obligatory, frequently bound morphemes” (Davis, Potts, & Speas, 2007, as cited in Aikhenvald, 2007, p. 2). This conception is based on a grammatical insight of evidentiality (Fetzer & Oishi, 2014).

Some languages share the feature of the obligation of stating the source of information markers, like in “Tariana (Arawak), Matsigenka (Panoan), Makah (Wakashan), Hup (Makú), Quechua and Aymara” (Aikhenvald, 2007, p. 2). The absence of these markers in the clauses is considered as a grammatical mistake (‘ungrammatical’), or reflects the speaker’s linguistic or mental incompetence (Weber, 1986, as cited in Aikhenvald, 2007). However, evidentials are distinguished to grammatical and lexical categories of languages by Aikhenvald (2007), when she states:

“World languages show various evidential strategies to account for the source of knowledge and are divided into two groups as grammatical or lexical evidential languages according to the way they express evidential meaning” (p. 2).

Respectively to her consideration of evidentiality from the narrow sense, her perception of grammatical evidentials falls in Fetzer and Oishi’s (2014) E1 category of evidentials (i.e., evidentials as an obligatory part of the clauses). She (Aikhenvald) expresses that: “...grammatical evidential languages consist of obligatory evidential systems which label each of the uttered or written sentences with morphological suffixes or clitics...” (2007, p. 3). An example of grammatical evidential language Tariana, shared by Aikhenvald (2004, pp. 1-2):

“Juseirida di-manika-ka
José football 3sgnf-play-REC.P.VIS
José has played football (we saw it)”

In this example, the morpheme [-ka] is an evidential marker that the speaker claims a direct visual evidence on the claimed information.

“Juseirida di-manika-nihka
José football 3sgnf-play-REC.P.INFR
José has played football (we infer it from visual evidence)”

In this example, the morpheme [-nihka] indicates the inference of the claimed information from visual evidence.

Unlike lexical evidential languages, which are languages where evidential markers are words or expressions that express evidential meaning. Interestingly, research has not proven the affiliation of lexical evidential languages to E1 languages, i.e., no language is equipped with an obligatory lexical evidential marking system (words or expressions are essentially added to a sentence or utterance to express evidentiality). Though, many lexical evidential languages (and lexical-grammaticalized evidential) fall under E2 languages (cf. Squartini, 2001; 2008; Cornillie, 2004; HaBler, 2002; 2003).

E2 (evidentiality 2) languages are languages where evidentiality is optional, which means that it depends on the interlocutor's use. It is where the markers are a set of linguistic devices (nouns, verbs, modal auxiliaries, or verbs) or even quotes, expressions, or a set of non-verbal means, such as facial expressions or air quotes (Fetzer & Oishi, 2014). Similarly, Aikhenvald (2007) sees lexical evidentials as the expression of evidential meaning via the use of various lexical constituents, mostly "adverbial, parenthetical, and particle constructions" (p. 2).

In English as an optional evidential language, various lexical items, adverbs, and diverse statements give quite different evidential meanings. Lazard (2001) notes that English and French serve as models for lexical evidential languages whose verb system does not contain any morphological evidential markers. Similarly, Mushin (2001) agrees on the fact that a lack in morphological evidentials in the English language is noticed. However, this does not mean that there are no grammatical evidentials, but it means that the evidential system in the English language is more typological (lexical) than morphological. Consider the case of the past tense; it can be seen as an indicator of uncertainty, like in the following example:

Mary: Where is John?

Kim: I saw him passing by the bank.

In this example, Kim literally (semantically) didn't answer Mary's question, when she asked about John's position at the time of speaking. The answer of Kim indicates the position of John in a past tense, which leads Mary to make an inference of either Kim ignoring John's position at the time of speaking (Kim's answer is less informative) or Kim being uncertain about John's position at the time of speaking (Kim's answer is irrelevant), or that Mary could, dependently on Kim's answer, guess John's position at the time of speaking. Undoubtedly, in such cases, Kim (speaker) believes Mary's (hearer) capacity of interpretation and knowledge about the situation, and Mary trusted in Kim's cooperativeness when Kim reported the necessary evidence to help Mary make such an inference (implicature), be it true or false.

In this section, evidentials are widely clarified to facilitate the perception of their classification in this research. Thus, the next section is where evidentials are classified, gathered, and tabulated.

2.3.3.2 Evidentials categories. This part tackles the taxonomy that is to be investigated in the corpus. To be able to achieve a rich, significant, and fruitful taxonomy, it is essential to see the basics on which the categorization of evidentials is constructed. Evidentials are differently categorised by scholars and researchers. For example, Palmer’s (1986) perception is the consideration of evidentials as epistemic modals, divided into hearsay and sensory evidence. Unlike many researchers, both speculation and deduction are not considered as evidentials, according to Palmer’s (1986) schema which is exposed underneath:

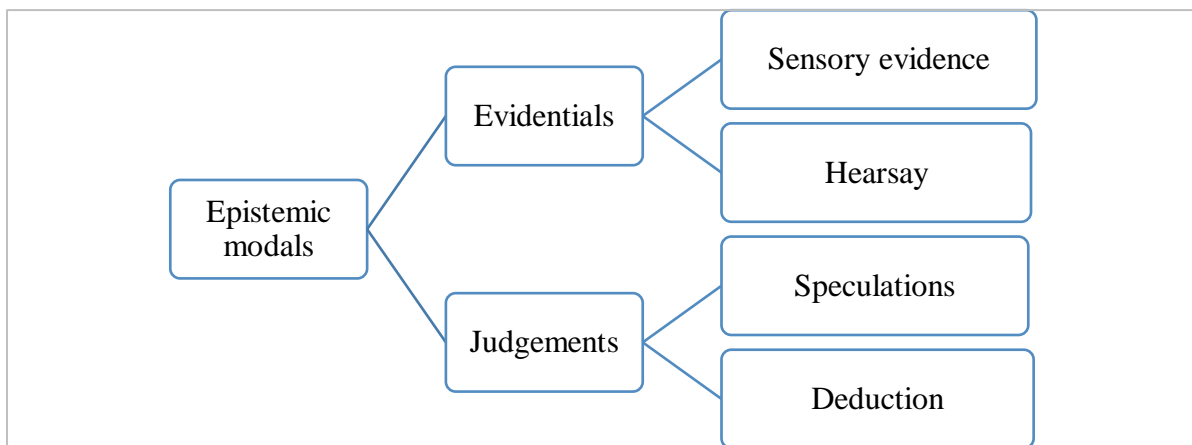


Figure 2.1: Palmer’s Model of Epistemic Modality (Palmer, 1986, as cited in Mushin, 2001, p. 25)

Concomitantly with Palmer (1986), Chafe’s (1986) perception is one of the earliest categorizations of evidentials. However, Chafe’s classification depends on the mode of knowing and considers ‘Deduction’ as one of the modes of knowing. Willett’s (1988) is a slightly adjacent perception to Chafe’s, in which evidentials categorization is determined by the type of evidence. Differently seen by Aikhenvald (2003), the evidentials are classified from the most personal to the least personal. Those three interesting perceptions (schemas) are shown, respectively:

Chafe’s (1986, p. 263) evidentials are basically in respect to the mode of Knowing, where he sets the following schema:

Source of knowledge	Mode of knowing	Knowledge matched against	
		Reliable	
		K	
		N	
???	---> belief	---> O	
Evidence	---> induction	---> W	---> verbal resources
Language	---> hearsay	---> L	---> expectations
Hypothesis	---> deduction	---> E	
		D	
		G	
		E	
		Unreliable	

Figure 2.2: Chafe's (1986, p. 263) Schema of Evidentiality

This significant schema has special relevance. It is used by many researchers, including Mushin (2001), Biber and Finegan (1989), Ifantidou (2001), and others. Willett's (1988) detailed categorization of evidentials is developed in his work on typological grammatical evidential languages. This categorization depends on the types of evidence the speaker possesses to communicate the information, as follows:

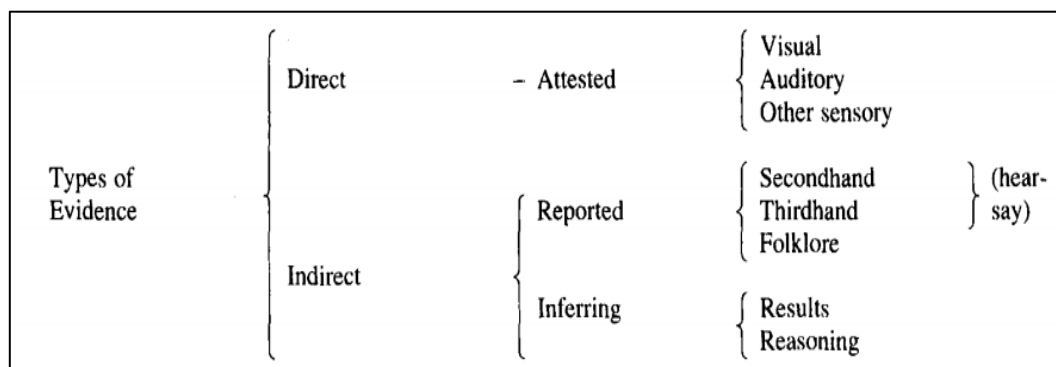


Figure 2.3: Willett's (1988) Types of Evidence

Aikhenvald's (2004) typological categorization of evidentials is built from most to least personal (Triki, 2022); it is divided into six categories, as follows:

- 1- Visual evidentials are evidentials attained through optic observation.
- 2- Sensory Non-visual evidentials are perceived through auditory, olfactory, tactile, and gustatory evidence.
- 3- Inferential evidentials is information inferred from substantial evidence.

- 4- Assumed/ assumption evidentials are evidentials showing some information or a hypothesis made out of reasonable thinking.
- 5- Hearsay evidentials are evidentials indicating that the knowledge is reported and/or adopted through a word of someone.
- 6- Quotative evidentials are evidentials with an explicit report of the reference to information.

These classifications are mentioned to help in the analysis of the findings. Each one of the previous schemas is adopted for a specific purpose. Palmer's (1986) perception is adopted to add the related notion of judgement to the deductive mode of knowing. Willett's (1988) division of evidence serves the purpose of detecting the amount of direct and indirect evidence used and whether this falls within the characteristics of this type of discourse (legal). Furthermore, Aikhenvald's (2004) classification is to be used as a measurement of the extent to which the speaker is being subjective.

Evidentials classification in this research is fundamentally indebted to Chafe's categorization that is based on the mode of knowing. Each mode is regarded as a category of evidentials. Each class is determined with respect to different scholars. The later are the proofs (real/alleged) that the speaker/writer considers to perceive the information/knowledge.

As mentioned above, the modes of knowing in Chafe's (1986) schema are Belief, Induction, Hearsay, and Deduction. Thus, the next section would initiate with the first mode of knowing Belief.

2.3.3.2.1 Belief evidentials. Belief is knowledge of which people are truly convinced. Despite the absence of the source of knowledge, which means they believe in it even though there is no evidence proof(s) corroborating their belief or some evidence proof calling for doubting that belief. This is why, Chafe (1986) qualifies the mode of knowing Belief as being a 'weak form of opinion' (p. 266). However, Belief is the core of validity of information, according to Chafe (1986), Palmer (1986), and Mushin (2001).

Also, Chafe (1986, p. 264) believes that everybody is aware of the firmness of the knowledge acquired. Furthermore, he specifies that the fact of awareness is not essentially based on consciousness. Simply put, people know that some types of information are more/less reliable than others. The firmness with which beliefs are grasped, consequently, depends on the source of knowledge of those beliefs, according to Krzyzanowska, Wenmackers, and

Douven (2013, as cited in Yildiz, 2018, p. 27). Concerning the source of ‘Belief’, the following subsection is developed.

2.3.3.2.1.1 Source of belief. In his schema, Chafe (1986) indicates no specific source for belief. However, he writes:

“People believe things because other people whose views they respect believe them too, or simply because, for whatever reason, they want to believe them. There may be evidence to support a belief, evidence which a believer may cite if pressed for it by a nonbeliever, but belief is always based on something other than evidence alone” (Chafe, 1986, p. 266).

Chafe sees that other factors are involved in the act of belief other than evidence. However, he accepts the possibility of finding evidence supporting the act of belief, that people would use to justify their belief(s).

Thus, it sounds logical to say that the sources of ‘belief’ are the reasons for which people adopt a piece of information as belief or to construct a belief. Interestingly, among these reasons, Chafe (1986) mentioned two reasons to accept a belief: first, the belief is “respected/trusted people’s belief” (p. 266), that is to say that the belief is accepted because trustworthy people accept this belief. Or, the second reason, people accept the belief because “they want to believe in it” (p. 266); the reason merely goes to the sixth sense, i.e., the instinctive sense.

Besides the reasons mentioned by Chafe (1986), other reasons were listed by Krzyzanowska, Wenmackers, and Douven (2013), where they say:

“Some things we believe because we saw them with our own eyes. Other things we believe because we heard them from others, or we read them in the newspaper or on the Internet. And again other things we believe on the basis of inferences we made” (Krzyzanowska et al., 2013, as cited in Yildiz, 2018, pp. 27-26).

Thus, seeing, hearing, reading information from newspapers, internet...are reasons to accept and construct beliefs; in addition to inferring, that is a reason to develop a piece of information into a belief. Ozturk and Papafragou (2008), and McCagg (2006, p. 161) confirm that “seeing is a reason to believe in something” (as cited in Yildiz, 2018, p. 27). They (Ozturk, Papafragou, and McCagg) assert that mostly all direct perceptual types of evidence are evidence that is worth believing in.

To wrap up, the source of knowing belief can be direct perceptual evidence, like seeing; indirect evidence, like hearsay, reading (information from newspapers, internet...), inferring; or other

factors, like trusted people's belief, or the willingness to believe. In the following, Belief evidential markers, tools, or indicators are discussed.

2.3.3.2.1.2 Belief evidential markers. Belief is expressed in a speech through the verbs 'to think', 'to guess', and 'to suppose', according to Chafe (1986, p. 266). Besides these markers, Ifantidou (2001, p. 7) adds 'to know' and 'to suspect'. She also notes that these evidentials reflect the degree of certainty of the speaker. The following examples provided by Ifantidou (1994, p. 16) show that the speaker communicates this information as a belief:

- a- I think that John is in Berlin.
- b- I guess that he will have to resign.
- c- I suppose that he will have to resign.
- d- I suspect that he is the burglar.
- e- I know John is in Berlin.

Besides, Belief can also be expressed, in addition to opinion and inference, by the prepositional constructions such as 'in my opinion' (Aikhenwald, 2007, p. 216).

In my opinion, not all adults are worth being treated as adults.

Also, the verb 'to see' may indicate many evidential meanings like inference, knowledge, understanding and "metaphorical senses of internal mental states" (Whitt, 2010, pp. 219-220). Consider the following example given by Whitt (2010, p. 219):

I see your point.

In his comment, the subject-oriented visual perception verb 'see' transmits the evidential meaning of understanding, which is related to knowledge, that is itself a type of evidence.

In the same vein of using knowledge as evidence, background knowledge would also be implicated. In this regard, other expressions that indicate that the knowledge communicated is based on memory are 'simply recalled', as is stated by Ifantidou (1994, p. 16), who provides the next examples:

- a- I remember that John won the prize.
- b- I recall that it was raining on my wedding day.
- c- As I recollect, his childhood was not easy.

By looking at the set of belief evidential markers in Chafe's taxonomy (1986) adapted by Ifantidou (2001, as cited in Yildiz, 2018, p. 42), it must be weird to notice the absence of the verb 'to believe' as an indicator that the information communicated is purely based on belief as

a source of knowledge. Nevertheless, Ifantidou (1994, pp. 113-114) uses ‘to believe’ as an evidential. Like in:

I believe John is in Berlin.

Moreover, the verb ‘to feel’ is also seen as a belief evidential that expresses an ‘internal mental or emotive state’ more than it expresses the physical textile perception, as stated by Whitt (2010, pp. 188-190). Consider the following examples cited by Whitt (2010, p. 190):

I feel that I have the truth, and I feel a violent desire to make you feel this cane.

Noticeably, this example shows the first ‘feel’ that reflects a mental state (belief), the second ‘feel’ reflects an emotional state, and the third and last ‘feel’ that is the literal physical textile perceptive use.

Whitt (2010) notes that the problem with ‘feel’ is not in the physical perception and internal state, but it is rather the distinction between ‘belief and intuition’. This means that the issue in the use of ‘feel’ as evidential is the speaker’s conviction, i.e., the speaker’s perception and degree of certainty about the information to qualify it as a belief or as an intuition. In this regard, Whitt (2010, p. 190) offers the following example:

I feel that a great deal of my illness and weakness is caused by loneliness and worry, and that it would do me all the good in the world to see you.

In the service of hedging, belief evidentials are also used. That is to say, the speaker uses belief markers to express a piece of information as an ‘obvious thought’ (Yang, 2014, as cited in Yildiz, 2018).

I think that John is a good guy.

In this example, the speaker communicates the information (John is a good guy) after the evidential (I think) that expresses the speaker’s uncertainty and the insufficiency of evidence the speaker has on the truth of the information. In other words, the speaker hedges from the responsibility of stating that (John is a good guy). Nonetheless, Nuyts (2000, 2008, as cited in Aleksić, 2016) asserts that the responsibility for the attitude towards the piece of information communicated as a belief is undoubtedly affiliated with a party (subject in the example provided above).

This part of research on belief evidentials gives birth to Table A.3 (in Appendix A). The table is organised as follows: evidential expressions, their conveyance (semantic usage), examples, and the reference that states the expression as evidential.

In this research, belief markers (expressions) are distinguished at the annotation phase into the expression of Thought, Conviction and Knowledge. After dealing with belief evidential markers, the next section is the second mode of knowing “Induction”, according to Chafe’s (1986) typology.

2.3.3.2.2 Induction evidentials. Chafe (1986) affirms that the English language resorts to making inferences without stating the source of knowledge. The speaker/writer opts to express the inference he makes from an uncommunicated source of knowledge, as shown in this example:

John must be upstairs.

The speaker expresses the information as an induction using the modal verb ‘must’ to convey a high level of certainty; however, s/he does not communicate the source of information or the nature of evidence from which s/he acquires the information. In this regard, Mushin (2001) agrees with Chafe (1986) on the fact that the use of induction in the English language with no reference to the nature of evidence is endorsed, though English language speakers deliver the source of knowledge when required only, unlike many other languages.

In the aim of illuminating this point, consider Aleksić’s (2016) example:

There must be many injured. The train has turned over. From The Independent newspaper (6th September, 2013) (as cited in Aleksić, 2016, p. 203).

This example has of indication on the mode or source of knowledge. However, the amount of certainty is highly expressed through the evidential and epistemic modal ‘must’. Aleksić (2016) comments that a high level of commitment due to the visual sensory evidence (witness on the event) is expressed in this example. Thus, the source of knowledge is the visual perception. In the following subsection, this point is further developed.

2.3.3.2.2.1 Induction source of knowing. Induction source of knowing is based on ‘evidence’ as a source of knowledge and is highly regarded as valid by Chafe (1986). Mushin (2001) further contends that induction is built on indirect/infering or direct/attested evidence. Those two types of inductive evidence are clarified:

The indirect/infering evidence is based on a direct sensory evidence known by the speaker but uncommunicated to the interlocutor(s), as in the example provided by Chafe (1986, p. 267):

It must have been a kid.

Mushin (2001) explains that the example is a case of induction based on an inference. To clarify, consider this example:

John must be upstairs. (indirect/infering)

The speaker communicates this statement as an inference from a piece of evidence, like in case John's car is nearby and s/he (speaker) is downstairs, John is not with him/her and there are no other places where John can go except 'upstairs'; or in case the light upstairs/in John's room is switched-on. That is to say, John is upstairs based on an inference. Conversely to the indirect/infering evidence, direct/attested evidence is the case when the speaker/writer personally witnesses or experiences the act of perception of the information uttered. Consider the example stated by Chafe (1986, p. 266):

I see her coming down the hill.

Chafe (1986) provides this example as a type of 'sensory evidence'. However, Mushin (2001) judges it to be a case of induction from a sensory experience. Deeply considering her (Mushin's) point of view, which is that the speaker sees a girl/lady (female) walking, driving, or running down the hill in the direction of the speaker. Consequently, the speaker infers the female is coming; (i.e., it must be a matter of direct perception + inference = expression of direct/attested induction). For a better understanding, the following example is provided:

I see John going home on foot. (direct/attested)

The speaker sees John, by his/her own eyes, walking in the direction of John's home, and he/she (the speaker) inferred that John is going home. It must be important that the speaker communicates the information based on a direct visual evidence and knowledge about John. It is worth mentioning that a slight confusion arised when following Mushin's (2001) perception of 'sensory evidence' as inductive evidential markers of direct/attested source. There is no doubt that 'sensory/perceptive evidence' as evidential markers denote a certain (direct/attested) way the act of inferring from a perceptive act, that is being perceived, analysed, and interpreted from an image, sound, odor, taste, or feeling to a verbal linguistic piece of information. However, for a better clarity, this paper considers sensory evidence, according to Ifantidou (2001), as a separate mode of knowing from induction. In the following subsection, a set of induction evidential markers are discussed.

2.3.3.2.2 Induction evidential markers. Induction is often verbalised in a discourse by the modal verb 'must', the verb 'to seem', the adverb 'evidently', or the adjective 'obvious' (Chafe, 1986, p. 266). Both Chafe (1986) and Mithun (1986, as cited in Yildiz, 2018, p. 28) agree on 'must' being an evidential marker of induction. Furthermore, Chafe (1986) qualifies it as a high degree of reliability marker, and Mithun (1986) sees it as a marker of high probability. Chafe (1986, pp. 266-267) also notes the similarity between the marker 'obvious' and the marker 'must' in terms of expressing reliability. Table A.4 gathers all of the mentioned

induction evidential markers (indirect/infering evidentials only), and it is joined in Appendix A.

Chafe (1986) subtitles ‘sensory evidence’ as a source of inductive mode of knowing, where he does not classify the sensory mode of knowing in his schema of evidentiality. However, he stated a set of perceptive verbs as sensory evidentials. Yet, as mentioned above, Ifantidou (2001) adopted ‘sensory evidence’ as a mode of knowing and adapted Chafe’s (1986) taxonomy, mentioned in Yildiz (2018). Thus, the next section is sensory evidence; it is organised differently from the modes of knowing. That is to say, this section is composed of, firstly, the definition of sensory evidence/evidentials. Then, this is followed by the sensory organ (source) and its relative markers.

2.3.3.2.3 Sensory evidentials. Sensory evidence evidentials are the expressions used to communicate a statement indicating the specific perceptual event that led to such information. Whitt (2010) provides a semantic and pragmatic study of perceptual verbs in which he investigates the evidential meanings conveyed by the later. He argues:

“...there are numerous lexical means in which speakers of languages such as English and German may indicate the source of the propositions they utter. It should come as no surprise, then, that perception verbs – verbs denoting sight, sound, touch, taste, and smell – are one of the primary lexical means speakers of English and German have at their disposal to convey the evidence for what they say” (2010, p. 1).

In his words, Whitt states that perceptual types of evidence are communicated as sources of knowledge by English speakers. He also declares that perception types of evidence are visual, auditory, tactile, olfactory, and gustatory; such a hierarchy is adopted from Viberg’s research (1983, as cited in Whitt, 2010). In this work, the sensory types of evidence are listed with reference to Viberg’s (1983) hierarchy, i.e., starting with visual evidence, then auditory, tactile, and finishing with olfactory and gustatory.

2.3.3.2.3.1 Visual evidentials. Visual evidence is the most reliable source of knowledge. Sbissa (2014) states: “seeing something is quite standardly taken as the paradigmatic case of acquaintance and therefore as a source of first-hand knowledge” (as cited in Yildiz, 2018, p. 15). This means that a high level of reliability is conveyed by visual evidence. Chafe (1986, p. 267) adds that these two examples are ‘equivalent’:

I see her coming down the hall.

She is coming down the hall.

Yet, visual perception verbs are the main evidential meaning holder markers among perceptual/sensory evidence, as argued by Whitt (2010). He deals with the different ways evidential meanings are expressed by the verbs of visual perception in English, namely the subject-oriented verb ‘to see’ and the object-oriented verb ‘to look’.

Whitt (2010) capitalises on the verb ‘see’ by saying:

“As an evidential marker, *see* signals both literal visual evidence and more abstract, metaphorical evidence related to intellection across its various complementation patterns, and both types of evidence appear to be expressed at relatively the same rate” (p. 85).

That is to say, the subject-oriented verbs of visual perception ‘to see’ show direct perception of the information communicated, as well as general observation or inference of the information, understanding, and knowledge about the information. In addition to all these indications of ‘see’, it metaphorically codes an internal mental state (Whitt, 2010).

Unlike the verb ‘see’, “All cases of look involve direct visual perception as evidence, or at least general observation of behaviour, leading to subsequent inference” (Whitt, 2010, p. 124). In other words, Whitt contends (2010), the object-oriented visual perception verb ‘look’ shows inference based on vision when used evidentially. Despite this fact, it is argued by Chafe (1986, p. 267) that it (look) is less reliable than other sensory subject-oriented verbs.

It is worth mentioning, as highlighted by Whitt (2010), that the evidential meaning is cancelled when the subject-oriented perception verb ‘to see’ is joined to a modal verb (see example 1), except ‘can’ that signifies the ability of the perceptive act (consider example 2), and/or when joined to a negator, which means the perceptive act does not happen (like in example 3). Unlike subject-oriented verbs, when object-oriented perceptive verbs are joined with a negator, the evidential meaning is still present, but the information is the opposite of what is to be stated without the negator (see example 4) (Whitt, 2010).

“I see Karen coming”. (Whitt, 2010, p. 8)

- 1- I should see Karen coming from here or this way.
- 2- I can see Karen coming.
- 3- I do not see Karen coming.
- 4- Karen does not look happy today.

Evidential meaning is destabilised when it occurs with thinking verbs clauses such as ‘I think or methinks’ and adverbs like almost, and fast (Whitt, 2010, p. 134). Like this example:

5- I think seeing Karen coming.

The later observations of the behaviour of visual perceptive evidential ‘see’ and ‘look’ seem to be a general rule for all sensory perceptive evidentials. The following examples may prove the similar behaviour:

- 1- I should hear my kids playing from here.
- 2- I can hear Karen playing.
- 3- I do not hear Karen playing.
- 4- Karen does not sound serene today.
- 5- I think hearing Karen cry.

Auditory evidentials are more highly used than visual ones, as observed by Whitt (2010). However, it can be argued that, unlike visual evidentials, auditory evidentials express less evidential meanings. The next subsection shows that those auditory evidentials meanings and their syntactic structures are reviewed.

2.3.3.2.3.2 Auditory evidentials. Auditory evidence is less reliable than the visual one; however, it is still reliable. Chafe (1986, p 267) sees “I hear her taking a shower” as equivalent to “She’s taking a shower”.

Based on Oswalt (1986) and Jacobsen (1986, as cited in Yildiz, 2018), the use of auditory evidentials expresses the act of knowing something through the reception of a sound(s) with no visual evidence, such as:

I hear John’s dog barking every morning.

In this example, the speaker claims that John owns a dog that barks every morning, and he knows this through an auditory type of evidence.

The evidential meanings expressed by the auditory perception verbs, subject-oriented ‘hear’ and object-oriented ‘sound’, are investigated by Whitt (2010). He notices that ‘hear’ reflects two types of evidential meanings, the ‘direct auditory perception’, which is the act of directly hearing the sound(s), or hearsay, the act of reporting someone else (discussed below), whereas ‘Sound’ reflects the inference or description of an auditory type of evidence (Whitt, 2010).

Concerning the object-oriented perception verb ‘sound’, Whitt (2010) observes that ‘sound’ behaves similarly to the object-oriented visual verb ‘look’; ‘it reflects the evidential meaning of an inference based on auditory direct perception or, mostly ‘the content of what is perceived’ (Whitt, 2010). Similarly to ‘look’, Chafe (1986) sees that the object-oriented verb ‘sound’ is less reliable than subject-oriented verbs. Consider this example given by Chafe (1986, p. 267):

He sounds like he's mad.

In such sentences, a certain degree of doubt is communicated, that it is accepted/expected to find that 'he is not mad'.

According to Viberg's (1983, 2001) hierarchy, the next perceptive type of evidence is the tactile sense. That is to say that in the succeeding subsection, tactile evidentials are revised.

2.3.3.2.3.3 Tactile evidentials. Tactile evidentials are expression of knowledge acquired based on the sense of touch. It is expressed by the use of the verb 'to feel'. This verb, as an evidential marker, conveys knowledge acquired over an external sensation (physical) or an internal sensation (emotional). The verb 'to feel' is rarely used to express a literal tactile perception as an external sense of touch (Whitt, 2010), as mentioned before, and when it happens, it is sometimes a metaphorical use. That is to say, the use of 'to feel' by the speaker/writer to communicate a piece of information that was perceived through the contact of body or skin, is less frequent, like in this example shared by Chafe (1986, p. 267):

I feel something crawling up my leg.

Instead, it is more frequent to use 'to feel' to express an internal sensation like an intuition, an emotion, or even a belief, claims Whitt (2010). Consider this example:

I feel something is going wrong with John.

In this example, 'feel' can be replaced by 'think', 'suspect', 'know', or any belief evidential marker. It can also be replaced by deductive evidential markers, like 'it seems' or 'I deduce'.

Whitt (2010) comments that:

"...it is often difficult, if not impossible, to distinguish between intuition and belief when attempting to pinpoint exactly what type of evidence the speaker is attempting to convey with evidential feel. This ambiguity allows speakers to avoid specifying whether they arrived at the information 'on a hunch' or through a process of deductive reasoning" (p. 202).

That is to say, 'to feel' is used to express a piece of information with a personal perception where the source is unclearly communicated. It should be noted that the verb 'to feel' behaves as a subject-oriented and object-oriented verb (Whitt, 2010). When 'feel' behaves as an object-oriented verb, it expresses less reliability than the subject-oriented 'feel' does (Chafe, 1986). Here are both examples of subject-oriented and object-oriented 'feel' in expressing a literal tactile feeling and an internal feeling:

I feel the sweat trickling down my back.

It feels energetic to have a French breakfast at 6 o'clock.

I feel that all the invitees are not coming to the party.

It feels like no one is interested in the lecture.

The tactile sensory evidence is the third classed source of evidence, according to Viberg's (1983) scheme. The fourth, sensory evidence, is the olfactory source of evidence. This type is seen in the next subsection.

2.3.3.2.3.4 Olfactory evidentials. Olfactory evidence is used as evidential to say that knowledge is acquired through a perception of an odour. The verb 'to smell' is used to convey this literal evidential meaning, like in this example:

"I smell that the bread is burning." (Whitt, 2010, p. 8)

Unlike the olfactory evidence conveying a reliable knowledge, Ifantidou (2001) claims that the 'it smells' is less reliable and conveys doubt about the knowledge. To corroborate this argument, the following example is used by Ifantidou (2001):

"It smells like roasted chicken".

Yildiz (2018) shares the belief of Ifantidou (2001) that it is about the use of the object-oriented form of the verb. He comments on the uncertainty of the speaker about the source of the specific smell. However, the reason behind the detected doubt must be the use of 'like' (that conveys the notion 'similar to'). The absence of 'like' dispels the doubt conveyed, as the following sentence proves:

It smells roasted chicken.

Whitt (2010) notes that 'to smell' is mostly metaphorically used to indicate inference rather than the literal meaning of sniffing. In the following example, to say it smells bad or it is suspicious. The speaker says:

"I'm smelling a rat" (p. 221).

After dealing with smelling perceptual evidential markers, the fifth, and last, sensory evidence source is gustatory evidence.

2.3.3.2.3.5 Gustatory evidentials. Gustatory evidence is evidentially employed to convey that information is learned over an experience of savouring, like the example below:

"I can taste that there's garlic in this soup" (Whitt, 2010, p. 8).

As an object-oriented gustatory verb, 'taste' is also functional, as in the example provided by Ifantidou (2001), where she adopts 'it tastes' as a reliable sensory evidential.

"It tastes good" (p. 5).

As an evidential marker, ‘to taste’ behaves similarly to ‘to smell’; Whitt (2010) states that it often appears in a metaphoric use, as in the following example:

“That tastes like censorship” (p. 221)

In this concern, Ifantidou (2001) sees ‘taste’ as more reliable than ‘smell’ as a source of evidence.

All of the mentioned sensory evidential markers are tabulated in Table A.5 (joined in Appendix A), with their usage and exemplified.

Sensory evidentials are supposed to be highly used in legal discourse related to criminology. However, in the genre used in this research, relatively to the topic, this evidential type is not supposed to be highly communicated. Similarly, the next evidential type, ‘hearsay’, is normally not allowed in the legal discourse, as previously discussed in Chapter one. However, it is expected to be immodestly used regarding the communicative situation, that is a debate between tech companies concerning safety and privacy.

2.3.3.2.4 Hearsay evidentials. Hearsay is a mode of knowing based on the hearing action from others (Chafe, 1986). Similarly, Whitt (2010) states that ‘hearsay’ is reporting the act of hearing information from someone (first-hand) and/or hearing someone reporting from someone else (second-hand). So, it is to transmit reportedly what is learned from someone through an auditory act. Hearsay’s a source of knowledge is discussed in the next subsection.

2.3.3.2.4.1 Hearsay source of knowledge. Hearsay as a mode of knowing is less reliable than the inductive one, as communicated by Chafe (1986), for the reason that the knowledge is adopted through ‘language’ rather than direct experience. In the same point, Yildiz (2018) confirms that all of Ozturk and Papafragou (2008), and McCagg (2006) agree that a reduced certainty is conveyed by knowledge attained through hearsay (indirect evidence) rather than perceptive evidence (direct evidence) (as cited in Yildiz, 2018).

2.3.3.2.4.2 Hearsay markers. Hearsay is expressed in discourse by a variety of phrases: X says, I’ve been told, X told me, X said, as in:

I’ve been told that Biden is the president of the U.S.A.

Donald Trump says the presidential elections are not honest.

In addition to saying/stative verbs, Mithun (1986) adopts ‘I hear’ as hearsay evidential. Correspondingly, Whitt (2010) specifies that the verb ‘hear’ expresses hearsay “when taking a

complementizer clause in its scope or functioning as a parenthetical construction” (p. 153), like in:

The Simpsons are having a barbecue party with Matt Groening, I hear/heard.

Similarly, Aikhenvald (2007) contends, “In English, different complement clauses distinguish an auditory and a hearsay meaning of the verb hear” (pp. 6-7), where she illustrates the point using the following examples:

- a- “I heard John cross the street”.
- b- “I heard that John crossed the street”

The example (a) denotes that the speaker heard by his/her own ears John’s feet stamping on the street, which is a direct perceptive evidential. However, example (b) indicates that the speaker indirectly knew that John had crossed the street. Thus, the speaker has no direct perception of the event, but s/he was told about the event (John crossed the street).

In addition to those Hearsay evidentials, Chafe (1986) states that there is a variety of indirect devices of hearsay, like ‘seems’, ‘supposed to’ and ‘apparently’. He recalls that ‘seems’ is an induction marker which reflects hearsay evidential meaning, and provides the following example:

“well Schaffer it seems had just had found the least article from the Smithsonian”.

Concerning the verb ‘to suppose’, Chafe (1986), Infantidou (2001), and also Mithun (1986), agree on the fact that ‘suppose’ serves inference and hearsay evidential meaning. This is shown in the following examples:

- a- Joe Biden is supposed to be the President of the States (hearsay).
- b- Joe Biden is supposed to follow Obama’s path (inference).

In example (a), the speaker indicates that the information is attained through hearsay. However, in example (b), the speaker knows the information because s/he deduces it, i.e., since both ex-president Obama and the current-president Biden work for the same political party, so Biden adopts (is supposed to follow) Obama’s policies and projects. In the same vein, the adverb ‘apparently’ is used to achieve this goal (Chafe, 1986). Izvorski (1997) notes that, among the lexical denotations of ‘suppose’ and ‘appear’, in addition to ‘alleged’ and ‘report’, is the meaning of hearsay and inference, whatever their structure might be (verb, adjective and adverb) (as cited in Yildiz, 2018). Consider the following examples:

Casa del Papel is reported/ reportedly the best series on Netflix and the most watched one.

Trump is alleged/ allegedly a bad loser.

Politicians are apparent/apparently good liars.

In addition to the mentioned markers, Infantidou (2001) adopts ‘X tells me’, ‘he is said’, ‘he is reputed’, ‘I hear’, ‘allegedly’, and ‘reportedly’ as hearsay evidential markers and provides the following examples:

He is said to have done it.

He is reputed to be very learned.

Allegedly, the computer has been stolen.

Reportedly, he is the burglar.

These examples indicate that the information communicated is learned from someone else, and the speaker has no direct experience of the situation.

Citing a reference is considered by Chafe (1986) as ‘the most precise and deliberate form’ of hearsay markers (p. 269), as in these two examples:

According to Dr. Johnson, Sara is suffering from a serious allergy called Anaphylaxy.

Lev Micheal (2020) declares that evidentiality is the major focus of social-oriented students.

According to Witzak-plisiecka and Jodlowiec (2010), “The world goes round by Gricean Maxims”.

By observing the previous examples, it is possible to detect that the information communicated by the speaker, referred to as the first speaker(s), can be heard or known in a different way, like reading. This is the point to be discussed in the coming section.

The hearsay mode of knowing is said to be knowing through language, as formerly mentioned. An issue can be raised, when considering the language as a source of knowing, which is that the language can not be heard; thus, it falls out of the hearsay mode of knowing, but is still related to language as a source. That is to say, the act of ‘Reporting’ is an evidential mode of knowing. It is even possible to say that hearsay is a part of reporting, regarding Bublitz and Bednarek's (2006) definition of reporting as the act where “we can ...refer to utterances of others and report what they said, wrote, meant, or thought [ibid]” (p. 861). All the same, reporting evidentials are words/expressions on the fact that the piece of information was learned through somebody else (Aikhenvald, 2004, as cited in Aleksić, 2016) (or from the speaker himself in a former situation). All of Mushin (2013), Nuyts (2001), Aikhenvald (2004) and Aleksić (2016) qualify reporting evidentials as expressing a lack of epistemic evaluation, specifically a lack of commitment, authority and responsibility towards the truth of the knowledge communicated. Nonetheless, reporting evidential conveys the epistemic

qualification of reported person (Nuyts, 2001, as cited in Aleksić, 2016). Conformingly, Hyland (1999, as cited in Yang, 2013) argues that reporting evidentials convey the speaker's epistemic evaluation and positioning towards the reported author. Hyland (1999) exemplifies by stating these reporting evidential markers: "X observe, X advocate, X establish, X ignore, X fail" (as cited in Yang, 2013, p. 123). In line with Hyland's perception, Thompson and Ye (1991), they (Thompson and Ye) expand that reporting evidentials gives the speaker/writer the ability to, firstly, express his/her epistemic stance towards the reported knowledge/person. Secondly, to convey the reported person's epistemic stance (as agreeing, being neutral, or disagreeing with the reported knowledge/person). And thirdly, to 'interpret' the reported person's words (Thompson & Ye, 1991, as cited in Yang, 2013, p. 123). Thus, it allows the speaker /writer to evaluate, express, and clarify the knowledge and epistemic positioning of the reported person.

Thus, reporting is to convey a piece of information that is mainly based on language as a source of knowledge. This information is obtained through the act of hearing, reading, or decoding any kind of language from sources like books, journals, newspapers, or even social media, videos, images, and gestures. The way the information is reported is either direct, like quoting, or indirect like paraphrasing (Bublitz & Bednarek, 2006). Reporting evidentials are numerous, like: 'X wrote', 'X narrates', 'X tweets', and 'X published', 'X observe', 'X establish', 'X ignore'. Consider the following examples:

Austin wrote about the wonderful life in Samersetshire in the 60's.

Epestin narrates the way he violated the victims.

I read in the 'News Times' that the majority of Miss World 2021 candidates are African women.

Obama tweets his satisfaction to finally see Biden as president of USA.

Trump published on his Facebook page his refusal of the presidential elections results.

All of the above examples indicate that the knowledge communicated is attained by language, with no direct witness/experience about the event.

Reporting evidential strategies are also numerous, as previously seen, Yang (2013) developed a consistent table of Lexico-grammatical realisations of reporting evidentials. In the following table, the syntactical strategy for reporting is of help in this research when dealing with evidentials out of the selected taxonomy.

Table 2.1: Lexico-grammatical Realizations of Reporting Evidentials (Yang, 2013, p. 121)

Evidential type	Realisation type	Lexicogrammatical realisations	Typical examples
Reporting evidential types	Verbal realisation	(Author + year) or (website + year) Verb that structure, be verb(ed) structure, It is V(ed) structure	(Hunston, 2000) X argue, maintain, found, ... that It is argued, it has been revealed
	Non-verbal realisation	As structure Noun that Adjunct	As indicated by... Fact, observation, agreement, finding, view, claim, According to X, in X's data, in X's view

This part of research on hearsay and reporting markers gives birth to a wider list of hearsay markers that is attached as Table A.6 in Appendix A.

Differently from Belief, all of the previously mentioned modes of knowing were based on an existing type of evidence (sensory or language). However, the following mode is the act of deducing thoughts out of the evidence, that is less certain than Induction.

2.3.3.2.5 Deduction evidentials. Deduction is the least reliable mode of knowing, according to Chafe's schema (1986). It is predicting/known information from some evidence (Chafe, 1986). Differently from Chafe (1986), as previously seen, Palmer (1986) considers deduction as a kind of judgement (Mushin, 2001).

2.3.3.2.5.1 Source of knowledge. Deduction, states Chafe (1986), is a mode of knowing based on hypotheses. Consequently, 'deduction' is similar in meaning to 'inference' that is identified by Clark (2010) as being "a kind of perception knowledge which is further elaborated, or processed mentally" (as cited in Yildiz, 2018 p. 16); Yildiz (2018) understands that it is the inference made by the 'evaluation of evidence'.

Unlike induction, deduction is expressed through the act of reflection in the inference elaborated from evidence, says Mushin (2001). Expanding on the distinction between 'deduction and 'induction' pointed out by Chafe (1986). Consider the following examples from Chafe (1986):

- (a) "It must have been a kid (Induction: Inference)" (Chafe, 1986, p. 267)
- (b) "Adults presumably are capable of purely logical thought. (Deduction)" (p. 269)

In example (a), it is, as mentioned above, a case of indirect/ inferring induction evidentiality; where the speaker has inferred from direct perceptive (sensory) evidence that a kid is/was there or does/did something. However, in example (b), the speaker has inferred that it is possible/probable that adults are capable of purely logical thought based on certain evidence. In fact, both sentences reflect a probability, where the example (a) conveys the speaker's higher determinacy and certainty about the knowledge communicated than is the case with example (b). In other words, example (a) is built on solid evidence (direct perceptive/sensory) whereas example (b) is built on observing evidence, reasoning evidence, and making a hypothesis. The types of evidence mentally processed to make a hypothesis are determined by Haan (2001, as cited in Yildiz, 2018), as being the evidence that leads the speaker to make the inference where s/he has/had not directly witnessed the 'action itself'.

2.3.3.2.5.2 The markers of deduction. Palmer (1986) points out that the employment of deductive evidentials implies that the knowledge the statement conveys is adopted through deductive thinking (Mushin, 2001). Some of those evidential markers are the modal verb 'should' and the adverb 'presumably' that are high degree reliable markers among deductive evidentials, whereas the less reliable deductive evidentials are the modal verbs 'can', 'could', and 'Would' (Chafe, 1986, p. 270). The following examples are provided by Chafe (1986, p. 270):

"Adults presumably are capable of purely logical thought".

"The claim does not address other retrieval influences that would be consistent with other results".

Chafe (1986) clarifies that 'would' serves in avoiding responsibility, and Palmer (1986, as cited in Mushin, 2001), as previously mentioned, points out that inferential evidentials reveal that the communicated knowledge is the result of 'deductive thinking'. That is to say, deductive devices such as inferring evidentials can be employed by speakers/writers as hedging tools. This is in conformity with Yildiz's argument (2018) based on Yang's (2013; 2014) studies. He (Yildiz) makes a synthesis to the effect that the use of this kind of evidentials "...helps the writer proclaim the unreliability of the information and helps him/her take a stance as an abstainer and negotiate the proposition with the reader and share the responsibility" (Yang, 2013, as cited in Yildiz, 2018, p. 17). Furthermore, hedging is expressed by the use of the modal verbs 'might' and 'may', and also the adjectives 'possible' and the adverbs 'perhaps' and 'probably' (Yang, 2014).

Besides, Aleksić, (2016) synthesises that epistemic distance is gradually conveyed by modal verbs as follows: Would> will> shall> should. She shares with Nuyts that "...clear would be positioned towards the top of the epistemic scale... high level of reliability. Likely and probably are in the middle of the positive side of the scale, whereas possibly is near its neutral point [ibid]" (2001, as cited in Aleksić, 2016, p. 200).

Deduction can also be expressed using the verb 'to seem'. Whitt (2010, p. 219) notes that 'seem' behaves in the same way as the object-oriented visual perception verb 'look'. However, Yildiz (2018) clarifies that 'seem' is, if permitted, a multi-evidential meaning marker. He states that the evidential meaning of 'seem' depends on the syntactic structure of the statement, where it indicates deduction, be it an inference from a hearsay or another type of evidence. Such constructions where a visual perceptual verb 'seem' is followed by an adjective (adj) can be illustrated by this example given by Yildiz (2018, p. 29):

My sister seems happy.

In this regard, Yildiz (2018) shares Gurajek's (2010) interpretation of the indication of this structure (seem + adj) as being deductive evidentiality. It is worth reminding that deductive evidentiality is mainly based on 'hypotheses', as is shown in Chafe's (1986) schema, the nearest notion to 'probability'; the interpretation made by Yildiz (2018) to the example is: "it is probable that my sister is happy". He (Yildiz) states the fact that, in such a construction (seem + adj), the evidence is 'inference based on appearance' and/or inferred from an 'observation'. That is to say, (seem + adj) indicates a case of deductive evidentiality.

Similarly, deduction is indicated by the construction where a visual perceptual verb 'seem' is followed by an infinitive (seem + infinitive) is a highly frequent evidential marker, (Cornilie, 2009). Consider these examples:

Tony always seems to offend people (Cambridge Dictionary).

She seems to have a strong argument to not come with us.

It seems to be fair to apply Qisas on murderers.

In the same way as the previous construction (seem + adj), the construction (it seems that...) has the same effect (Yildiz, 2018). Dixon (2005) observes the lack of certainty in such a construction (it seems that...), that he interprets as: "it seems (to be) true that ..." (p. 204). He provides the following example:

It seems that Mary found the body.

The interpretation of this example is: "It seems (to be) true that Mary found the body" (p. 204). Unlike the previous denotation, the same construction 'it seems that...' is observed by Yildiz

(2018) to behave differently, mostly like an inference made through ‘hearsay’. Like the following example provided by Yildiz (2018, p. 36):

It seems that my father is at home.

He claims that this example “...implies that the truth that my father is at home is based on knowledge attained through hearsay” (p. 35).

Concerning ‘appear’, based on Fetzer’s (2014) observation, it (‘appear’) behaves similarly to ‘seem’ in a linguistic context. Yildiz (2018) adds that both ‘seem’ and ‘appear’ ‘contribute’ in epistemic modality and the expression of evidentiality. By this, Yildiz (2018) aims to vouch that, since both ‘seem’ and ‘appear’ express modality and evidentiality and behave alike, it is possible to conclude that they express the same evidential meanings in similar syntactic structures. Supportively, Aleksić (2016) comments on ‘appear/apparently’ and ‘seem/seemingly’ as being more evidentials than epistemic markers.

In addition to the previously mentioned inferential evidential markers, Ifantidou (2001) added other lexical markers of inference that are: ‘must have’, ‘I gather’, ‘I deduce’, ‘so’, ‘presumably’, and ‘consequently’. Mithun (1986, as cited in Yildiz, 2018, p. 36) adds ‘I guess’ and ‘must have been’ to the inference evidentials. Table A.7 (in Appendix A) shows Deduction evidential markers apart from the modal verbs (should, can, could, would, may, might...).

It is worth noting that, as argued by Bednarek (2006), evidentials convey more than marking evidence, according to Chafe and Nichols (1986), and that the evidence is simply one consideration of the epistemological ones that are ‘attitudes towards knowledge’ (Chafe, 1986, p. 262). This phenomenon is identified by Mushin (2001) as an epistemological stance expressed through evidentials use. Consequently, these linguists (Bednarek and Mushin) conclude that all of the following concepts are implicated with evidentiality: ‘truth, certainty, doubt, reliability, authority, confidence, personal experience, validity, inference, reporting, factual and imaginative stance, evidence, confirmation, surprise, and expectedness’ (Bednarek, 2006, p. 637). Regarding the needs of this dissertation, some notions have been investigated under the following title:

2.3.3.3 Notions related to evidentiality. Noticeably, evidentiality (from the broad sense, as considered in this research) is deeply related to variant notions such as reliability, commitment, hedging, authority, credibility, certainty etc. These notions are the effect of evidentiality (evidential markers) on the expression. This section clarifies the way evidentiality mirrors these mentioned notions, respectively. To commence the inquiry into these notions, it

is important to clarify the scope that gathers them. This scope is the speaker's assessment of knowledge called 'epistemicity'. The second point is the notion inevitably mentioned in accordance with evidentiality, reliability. The investigation of reliability is primitively an attempt to classify the modes of knowing on the reliability scale. The third point is commitment, which is also a matter of measurement, from highly committed to completely detached from the proposition expressed. The fourth notion is the act of deliberately expressing detachment from the certitude of the piece of information uttered, called hedging. The fifth and sixth points are authority and credibility, respectively; these two concepts are implicated with evidentiality in specific settings such as speaker-hearer relationship and topic of discussion (expertise domain). The last point is the notion of certainty that is conveyed through evidential markers; it is the degree of conviction or belief in the sureness of the piece of information expressed. This means, the notion to be identified, in the following section, is the umbrella term epistemicity and its relation to evidentiality.

2.3.3.3.1 Evidentiality and epistemicity. In Greek, 'episteme' means 'knowledge', though all sources of knowledge (in the narrow sense of evidentiality), certainty of knowledge (epistemic modality), expectation from knowledge (mirativity), and knowledge limitation (extent) are concerned with epistemic positioning/stance (Biber et al., 1999, as cited in Bednarek, 2006). Thus, as declared by Aikhenvald (2003, as cited in Marín Arrese, Haßler, & Carretero, 2017), evidentiality (narrow sense) is a subcategory of epistemicity. In turn, the broad sense of evidentiality (functional coding) takes systematically (essentially) all of the mentioned knowledge dimensions (speaker's evaluation) into its scope (Fetzer, & Oishi, 2014). As has been exemplified by Bednarek (2006, p. 637):

Evidential adverbs: clearly, notoriously, famously...

Certainty of knowledge: (epistemic modal) expressions (may, perhaps, must) or evidential expressions.

Mirativity: (expectational adverbs) amazingly, surprisingly...

Extent of knowledge: generally, in most cases...

Thus, as confirmed by Bednarek (2006), both epistemological positioning and evidentiality notions are interconnected.

With the aim of localising the point of intersection of these two domains, all of Givón, (1982), Chafe (1986), De Haan (1999), Dendale & Tasmowski (2001), Aikhenvald (2004), Bednarek (2006), and Cornillie (2009) agree on the fact that reliability and commitment are the

intersection-points. These two notions cover the zone of intersection where both reliability and commitment are reflected by inferencing evidentials (like in modal verbs). And yet, commitment is reflected as self-implication with the truth of the piece of information (like in sensory evidence evidentials).

Consequently, it sounds logical that “mode of knowing implies something about reliability” (Chafe, 1986, p. 266). De Haan (1999) sees that the relationship between evidentiality and epistemic modality is not about categorization. He (De Haan) distinguishes between evidentiality and epistemic modality by stating: “evidentials assert the nature of the evidence for the information in the sentence, while epistemic modals evaluate the speaker’s commitment for the statement” (1999, p. 1). Likewise, epistemic modality is identified as the explicit expression of the speaker’s commitment and the proposition’s reliability (qualification of the truth value of the utterance) (Lyons, 1977, as cited in Yildiz, 2018).

Indeed, the modal verb ‘may’, for instance, is an epistemic model with an indication of speaker commitment to an intermediate probability/possibility of truth (reliability); in parallel, ‘may’ is an evidential marker of the deduction mode of knowing (based on hypothesis), which indicates a lower commitment to the truth (reliability) of the proposition.

In the same vein, Fetzer and Oishi (2014) conclude that the broad sense of evidentiality “cover[s] any linguistic expression of attitude towards information” (p. 325) and that the intersection between evidentiality and epistemicity occurs at the level of inferencing (reasoning) concerning the reliability of knowledge and speaker’s commitment. Simply put, inference expressions are the evidentials that highly convey epistemicity.

Furthermore, as previously mentioned, deduction is classified by Palmer’s (1988) model of epistemic modality as a subcategory of judgement instead of evidential. This is to say that the issue is situated at the level of speaker’s judgement and evaluation. Cornille (2009) confirms that the point of intersection of ‘epistemic and evidential functions’ is the speaker’s evaluation of reliability of the source of information (subjective judgement) (as cited in Cornillie et al., 2015). Thus, since the intersection is about the evaluation of the reliability of the source of information, it must be interesting to question the epistemic situation when the speaker is himself/herself the source of the reliability of the information. This means that all that might fall under the scope of subjective judgement must also be implicated with the intersection of evidentiality and epistemicity. For instance, the direct sensory evidential of visual evidence ‘I see’ expresses a high reliability degree as referred to by “the most certain kind of knowledge” (Sweetser, 1984, as cited in Bednarek, 2006, p. 638). Moreover, evidentials of belief ‘I remember’ and ‘I think’ are another example, as confirmed by Fetzer and Oishi (2014), for

whom ‘memory-based’ sources can be implicated with the intersection of evidentiality and epistemicity. Its implication falls in the zone of commitment and reliability.

Nonetheless, indirect sources may also be involved with this intersection (Fetzer & Oishi, 2014), as shown in these three hearsay evidentials ‘X confirms’, ‘X says’, and ‘X pretends’. Consequently, indeed, evidentiality gathers the set of expressions that signal the source of knowledge and, inevitably, meets the scope of epistemicity by reflecting commitment and reliability. For a better perception of the relationship between evidentials and reliability, this point is discussed in the following subsection.

2.3.3.3.2 Evidentiality and reliability. As stated by Nagel (2012), “[r]eliability is what really matters in epistemic evaluation” (p. 5). It is meant by reliability, the trustworthiness of the proposition. Or, as seen by De Haan (1999), the believability of the proposition. It is differently identified by Cornillie, Wiemer, and Marín-Arrese (2015, p. 8) as the extent to which “you believe – give trust to – somebody’s assertion being true or other speech acts being sincere” depending on ‘logic’ and the speaker’s certainty.

Reliability can be expressed by different tools, of which evidentials use and reliability markers are the common ones. In this paper, importance is given to the notion of reliability conveyed through evidentials use. Chafe (1986) states that “not all knowledge is equally reliable” (p. 264), and he specifies that “...mode of knowing implies something about reliability” (p. 262). In this regard, De Haan, (1999, p. 6) has drawn the schema of ‘Evidential hierarchy’ where he classifies the types of modes of knowing from more believable to less believable, respectively, as follows: visual > auditory > nonvisual > inference > quotative. Simply put, the visual sensory evidentials are the most reliable expressions among evidential expressions. Then, it is followed by auditory and nonvisual. To come at inference and quotative as the least reliable evidential expressions.

Besides, as previously seen, Whitt (2011) discusses the issue of reliability and the five senses; he states that unequal reliability is attributed to some physical sensations in comparison to others, decreasingly from visual > auditory > tactile > olfactory > gustatory. This reliability hierarchy is established by Viberg (1983, as cited in Hommerberg, & Paradis, 2014). The use of any evidential is a reference to a specific mode of knowing and, thus, a specific degree of reliability depending on the situation.

Remarkably, belief as a mode of knowing is unclassified on the reliability scale by researchers. The speaker’s expression of belief is a climax of reliability, according to Chafe’s

(1986) schema. However, he comments on the schema by stating that it “does not imply that belief is more reliable or deduction is less reliable than the others” (p. 263). The reason for which belief is not classified on the reliability scale is that both notions (reliability and belief) are in a philosophical debate. The centre of this debate is what Riggs (2002) calls the ‘value principle’. This principle consists of the perception that “[k]nowledge is always more valuable than (mere) true belief” (p. 79). Similarly, “[n]ot just any true belief counts as knowledge” is “[t]he core idea of Goldman’s original reliabilist theory” (Nagel, 2012, p. 2). This is to say that belief is not deemed to be more reliable than knowledge. Furthermore, De Grifte (2021, p. 1) vouches for the fact that “knowledge is justified true belief”. This idea is reliabilists’, externalists’, and instrumentalists’ central principle, that is unaccepted by epistemologists, internalists, and naturalists (the opponents of reliabilists), like all of Jones (1997), Kvanvig (1996), and Zagzebski (1998).

Without getting deeper into this philosophical issue. There are two main factors behind stating these facts: The first is the expression of awareness that a deep debate is being undertaken for an immemorial time. And, with respect to epistemologists, internalists, and naturalists, this paper is aligned with the reliabilists perception. Simply put, this paper takes in consideration knowledge as more reliable than belief; i.e.: supplement value is attributed to knowledge in comparison to belief (depending on the case study). The second reason is to highlight the type of relation between belief and reliability, which is a form of ‘evidentialist reliabilism’ as called by Comesaña (2010) to say that “justified beliefs must always be based on evidence, where the appropriate type of reasoning from evidence to belief is reliable” (as cited in Nagel, 2012, note 4). As confirmed by BonJour (1980; 2003, as cited in Nagel, 2012, p. 3), it “is still being epistemically irrational and irresponsible in accepting beliefs whose provenance can only be a total mystery... whose status is... no different from that of a stray hunch or arbitrary conviction”. Consequently, justified true beliefs (that are, belief + evidence + appropriate reasoning) are worth being reliable.

This part of the philosophical debate is discussed in this research to contribute to a lack in the evidentiality scale of reliability that has not taken into consideration Belief. Henceforth, belief is considered less reliable than knowledge regarding the needs of the corpus, which is a legal discourse.

The degree of reliability can be conveyed, as mentioned above, by the use of reliability markers. These markers are “generally expressed by modal verbs and modal adverbs” (Fetzer

& Oishi, 2014, p. 325), such as: The adverbs: ‘certainly’, ‘surely’, ‘exactly’, ‘undoubtedly’, ‘essentially’, ‘basically’, ‘by definition’, ‘invariably’, ‘literally’, ‘generally’, ‘normally’, ‘primarily’, ‘specifically’, ‘particularly’, ‘in some sense’, ‘virtually’, ‘possibly’, ‘probably’, ‘perhaps’, ‘maybe’ (Chafe, 1986, pp. 262-267) and ‘obviously’ (Ifantidou, 2001, p. 7); also, modal verbs such as ‘may’ and ‘might’ (Chafe, 1986, pp. 264-5). And, the epistemic models: ‘can’, ‘could’, ‘must’, ‘will’, ‘ought to’ and ‘should’ (Ifantidou, 2001, p. 8).

After dealing with reliability, stating some of its markers and clarifying its position with belief, the next section is the hottest epistemic issue. It deals with self-implication with the truth of the knowledge conveyed, called commitment.

2.3.3.3 Evidentiality and commitment. Commitment is “attitudes towards knowledge” (Chafe, 1986, p. 116). They are identified as “an item of language which a speaker uses to explicitly qualify his/her lack of commitment to the truth of a proposition he/she utters” (as cited in Vassileva, 2001, p. 84). That is to say that commitment is the expression of self-implication with the reliability of the communicated proposition. Consider the following examples:

1. In fact, Laura is pregnant. (direct perceptual evidence)
2. Apparently, Laura is pregnant. (indirect inferential evidence)
3. Reportedly, Laura is pregnant. (indirect hearsay evidence)

The first example shows the direct involvement of the speaker in the certainty of the information communicated. Thus, the speaker is committed to its certainty. The second example shows an indirect inferential type of evidence that implicates speaker’s weaker commitment towards the certainty of the information. Conversely, the third example shows a reported indirect hearsay type of evidence that indicates a lower degree of speaker’s commitment towards the information communicated.

In any speech, the speaker expresses a certain degree of commitment. That is to say, firstly, in all communicative acts, a speaker is involved in the truth of the communicated propositions at all of the ‘propositional’, ‘functional’, and ‘evaluative’ content levels (Bublitz & Bednarek, 2006b). Secondly, commitment is a matter of grade “whose end points are complete commitment and complete detachment” (Stubbs, 1986, as cited in Vassileva, 2001, p. 84).

Concerning the grades of commitment, Palmer (1986), by considering evidentiality, scales the modes of knowing with respect to the speaker’s commitment:

“There are at least four ways in which a speaker may indicate that he is not presenting what he is saying as a fact, but rather: (i) that he is speculating about it (ii) that he is presenting it as a deduction (iii) that he has been told about it (iv) that it is a matter only of appearance, based on the evidence of (possibly fallible) senses. ... All four types are concerned with the indication by the speaker of his (lack of) commitment to the truth of the proposition being expressed”. (Palmer, 1986, as cited in De Haan, 1999, p. 05)

That is to say, commitment is gradually presented as follows:

speculation>deduction>hearsay>induction/sensory. Commitment must be ultimately expressed when communicating a fact (Belief). This appears in this passage: “he is not presenting what he is saying as a fact, but rather...”, where Palmer (1986) uses the word ‘rather’ to qualify the following types as expressing a moderate or lesser degree of commitment than the expression of facts.

The uncertainty or the conservatism towards the truth of the proposition is conveyed by the expression of a lack of commitment by the speaker. This lack of commitment is presented by the use of evidentials. Faller (2002) believes that an evidential use transmits the speaker’s expression of commitment as possession of a specific type of evidence, and she adds that the real or alleged use of evidentials is a matter of expressing sincerity (Faller, 2002, as cited in Faller, 2006b, p. 21). Thus, the use of a specific evidential when many others can appropriately be used is a function of the speaker’s sincerity. The choice of evidentials is a point that has been discussed by Mushin (2001, p. 55); otherwise, the choice must be stimulated by uncommunicated reasons (goals and intention). This phenomenon of communicating a specific evidential instead of a more reliable one is a kind of hedging. This means that evidentials also echo hedging. Thus, the next notion to be discussed is hedging.

2.3.3.3.4 Evidentiality and hedging. Hedging is an epistemological consideration, which is the use of devices that modify (lower) the precision where it would be exact (Chafe, 1986); it is to give approximate information instead of the precise one. Lakoff (1972) identifies hedging as the use of a tool that “implicitly involves fuzziness” in a discourse (as cited in Johansen, 2020, p. 11).

Chafe (1986) provides some hedging devices such as ‘sort of’, ‘kind of’, and ‘about’. It is stated by Sidnell (2012, p. 299) that “a speaker can modulate the utterance with hedges such as ‘I think’ or ‘I suppose’ [ibid]”. Also, Aleksić (2016, p. 201) confirms that non-factual verbs

(belief verbs or mental state predicates) convey epistemic distance. Fraser (1975; 2009, p. 5) considers that ‘I should/can/must’ serve as hedging tools in some cases, like in this example:

I should apologise for running after your cat.

In Vass Ward’s (2015) research paper on hedging in legal discourse, it is consistently confirmed that all of the speculation, deduction, hearsay, and sensory evidence markers are prominent in the service of hedging, mainly modal verbs.

Hedging is deliberately used in discourse. Hyland (1998b) argues that hedging is resorted to make the interlocutor question the truthworthiness of the information communicated. Hyland (1998b) provides two main reasons for the use of hedging in a discourse by stating: “hedging refers to any linguistic means used to indicate either a) a lack of complete commitment to the truth value of an accompanying proposition, or b) a desire not to express that commitment categorically” (p. 133).

In the same vein, Aikhenvald (2007) states that “the non-visual, non-first-hand evidentials and reported evidentials in systems of varied types may acquire additional meanings to do with a lack of intention, control, awareness, and volition on the part of the speaker” (pp. 5-6). This means that the use of the above-mentioned evidential (non-visual, non-first-hand, and reported) in a certain way serves hedging. Aikhenvald’s quote implies that the choice of the evidential marker is related to the speaker’s intentions and will. This leads to the reflection that evidentials use must be implicated with the expression of responsibility, entitlement, and authority of the speaker.

The next session undertakes to discuss the notion of authority in relation to evidentiality, based on the research of Fox (2001) related to the linguistic anthropologists Clemente (1998) and Hill and Irvine (1993).

2.3.3.3.5 Evidentiality and authority. Authority is the consideration of a person/party (by him, her, it or by others) as being superior (expert/wise) in the issue discussed. Hommerberg and Paradis (2014) define authoritative persons as “...individuals [who] identify themselves as having the right to exercise the power to lead others [ibid]” (pp. 14-15).

Evidentials use involves all of authority, responsibility, and entitlement, Fox (Fox, 2001) assures, as a consequence of specific situations and respectively to the speaker-hearer relationship. Similarly, Mushin (2013), Aleksić (2016), and Sidnell (2012) believe that evidentials indicate the speaker’s/ writer’s “authority over knowledge” (p. 316). In other words,

the speaker's expression of responsibility for trustworthiness of the expressed information (called also epistemic authority).

Fox (2001) bases the investigation of authority in evidentiality on Givon's (1982, 1989) works, where he (Givon) uses the word "unchallengeable" or "social contract" to mean social authorisation for speaker's claim of trustworthiness. She (Fox) argues by identifying authority as a reduced exposure to challenge.

Despite the fact that Fox (2001) is sceptical about the inconsideration, by Givon (1982), of the speaker's certainty and judgement of settings to argument, she agrees that some types of propositions are marked by a resilience towards challenge, such as:

- "Propositions which are to be taken for granted, via the force of diverse conventions, as unchallengeable by the hearer and thus requiring no evidentiary justifications by the speaker" (Givon, 1982, as cited in Fox, 2001, p. 173), seen by Fox (2001) as 'shared world knowledge'. This type falls under the expression of belief in the present dissertation.

- "Propositions that are asserted with doubt, as hypotheses, and are thus beneath both challenge and evidentiary substantiation [ibid]" (Givon, 1982, as cited in Fox, 2001, p. 173), identified by Fox (2001, p. 172) as 'presupposed information'. These propositions fit the expression of supposition as belief, guess, assumption, and deduction.

Thus, as a conclusion from Fox's (2001) research, besides the communication of 'personal experience events' (sensory evidence or zero-evidentials expressions), 'shared world knowledge' (expression of belief), and 'presupposed information' (guess and deduction), respectively, to the speaker's certainty and settings (audience and situation), the speaker is able to communicate with a higher authority than in "propositions that are asserted with relative confidence, [that] are open to challenge by the hearer and thus require—or admit—evidentiary justification [ibid]" (Givon, 1982, as cited in Fox, 2001, p. 173). This type of proposition fits the expressions of hearsay and induction (inference), where a speaker can barely express authority and responsibility for the information communicated. Hommerberg and Paradis (2014) believe that one of the strongly related notions of authority is credibility. That is why the next section tackles the notion of credibility.

2.3.3.3.6 Evidentiality and credibility. Similar to the notion of authority, credibility is built on a set of aspects (situation, audience, topic...) in addition to the linguistic ones. Hommerberg and Paradis (2014) note that it can be generated based on epistemicity, evidentiality, and temporality, i.e., it is an intersection of the three mentioned aspects. That is

why credibility cannot be investigated based on linguistic features (implicit and explicit) alone; it requires extra-linguistic knowledge (general world knowledge) about the topic (Hommerberg & Paradis, 2014).

According to Hommerberg and Paradis's (2014) research, it is possible to infer that the relation between credibility and evidentiality can be explained as follows: Credibility is optimally gained through the use of evidentials of direct experience; it means when the speaker is a witness, i.e., s/he is worth being seen as credible. Credibility is moderately accredited when inferential evidentials are used; it means that, in such a case, credibility is dependent on the speaker's mental capacities (i.e.: audience knowledge about the speaker). Moreover, credibility is lost or dependent on the reliability of the reported source when hearsay evidentials are used (the speaker is a reporter). Matsui and Fitneva (2009) confirm that "the source can be decisive for the credibility of information" (p. 2).

Unlike credibility and authority, certainty is a concept that can be communicated through the use of specific items. The following section clarifies this notion with respect to evidentiality.

2.3.3.3.7 Evidentiality and certainty. Certainty is the speaker's evaluation or supposition of the truth possibility of a statement (Coates, 1983, as cited in Aleksić, 2016). Therefore, Aleksić (2016) identifies certainty as "confidence (or lack of confidence) in the truth of the proposition expressed". In the same vein, with no indication to the specific procedure to arrive at the truth possibility of a statement, Chafe (1986, p. 264) underlines that people are conscious that "some things they know are surer bets for being true than others" (p. 264), which means that people are/must be aware of the extent to which the information they know is certain or uncertain. This is to say that certainty is a 'scalar notion', as stated by Bongelli and Zuczkowski (2008, as cited in Fetzer & Oishi, 2014b). Ifantidou (2001, p. 7) provides the following examples using certainty adverbs:

He is probably the best actor of the year.

John is possibly coming tonight.

The answer is undoubtedly 'no'.

Evidently, the ball was over the line.

The ball was, obviously, over the line.

Surely, you know what I mean.

It is certainly very beautiful.

Fetzer and Oishi (2014b) report, conservatively, the assertion of Bongelli and Zuczkowski (2008) that a significant characteristic of communication is certainty, and it is unavoidably conveyed. This is to say, evidentials implicitly/explicitly convey the speaker's degree of (un)certainty, respectively, to the mode and source of knowing (Fetzer & Oishi, 2014b). Belief markers can be taken as an example (Aleksić, 2016), where the certainty about the reliability of the proposition is gradedly conveyed throughout these evidentials of mental state (non-factual verbs): know/believe > think > suspect > wonder...

It is worth mentioning that the value of truth (opposite of lie) is of no-relevance to certainty since the expression of certainty can occur with both true and false propositions (Bongelli & Zuczkowski, 2008, as cited in Fetzer & Oishi, 2014b).

This chapter ends with a suggested framework to analyse the discourse studied. This is to say that in the following part four of the ongoing chapter, the framework is discussed. A whole part is devoted to the framework because of the diversity of the investigated aspects.

2.4 Frameworks of Analysis

In this part of the research, the framework used is presented, and the method of analysis used is explained. The method is the composition of three theories of language: (1) Systemic Functional Linguistics, (2) Appraisal Theory, and (3) Critical Discourse Analysis. SFL is used because it shares the belief of this paper in the interference between discourse, meaning, and the speaker's objectives. Halliday (1997) sees that the linguistic analysis of a text must be the investigation of the functional dimension of a clause, in addition to the speaker's objective(s) behind the communication of that clause (Matthiessen and Halliday, 1997, as cited in Almurashi, 2016). Furthermore, Appraisal Theory is used because it decorticates the stance the speaker takes or even expresses implicitly. Also, CDA is used because of its deep implication with ideology, that is an issue treated by SFL. CDA is mostly the investigation of the impact of text (or a part of text) on a social interaction and the social perspective of text. It mainly pays attention to the social power exercised by interlocutors in an interaction, and this is the point at which this research seeks to investigate the manipulative strategy adopted by the interlocutors (if any).

In this research, the corpus is investigated at the lexicogrammar and discourse-semantics levels of analysis with the aim of better scrutinising the effect of a word on a clause, a clause on a text, and a text on the whole discourse. Put differently, in this research, the focus is on the effect of evidential and affect markers (be they words or a phrases) on the clausal and

textual levels. Consequently, one of the interests of this research (as mentioned earlier in chapters 1 and 2) is to investigate the attitude of the speaker and trace through the speaker's stance and attitude the manipulative strategy used. Martin and Rose (2007, as cited in Chalimah et al., 2018) state that the analysis and negotiation of attitude can be accomplished based on SFL, specifically SFL's interpersonal function. Therefore, to conduct this study, the use of Systemic Functional Linguistics is a must. Thus, in the following section, the definitions of SFL and SFL's metafunctions are presented.

2.4.1 Research on Systemic Functional Linguistics

In this part of the research, Systemic Functional Linguistics is defined and the metafunctions are reconsidered.

2.4.1.1 Systemic functional linguistics. Unlike Traditional Linguistics that cares for the Form (parts of speech: subject, verb, object...), systemic functional linguistics cares for the function of different parts of speech (process, participants, attitude, and organisation). The functionality of this systemic approach occurs in the inquiries it treats, "how do people use language?" and "how is language structured for use?" (Eggins, 2004, p. 3).

In the 1980s, Halliday shared this functional method to scrutinise language use, and determine the multiple and simultaneous roles the clause (constituents and structure) expresses. Eggins (2004) identifies this approach "as a very useful descriptive and interpretive framework for viewing language as a strategic, meaning-making resource" (pp. 1-2). Besides, Martin and Rose (2003, as cited in Alaei and Ahangari, 2016) see that the contribution of SFL is the simultaneous identification of strands of meanings through clauses and sentences constructions.

In 1994, strands of meanings were recognised as language functions (specifically language metafunctions): ideational, interpersonal, and textual (Halliday, 1994, as cited in Alaei and Ahangari, 2016). These metafunctions are briefly presented in the next section.

2.4.1.2 Systemic functional linguistics metafunctions. Since language is a set of choices made through semiotic and conventionalized coding systems, it is semantically complicated to the extent that three strands of meanings occur simultaneously (Eggins, 2004). These strands are identified by Halliday (1985, 1989, 1994) as being language ideational, interpersonal, and textual (meta)functions. Eggins (2004, pp. 210-214) expands on this point by specifying the clause constituents' performance of three functional roles. She explains that any clause constituent makes, firstly, meaning as a representation of reality or experience, which is seen as the ideational or experiential (meta)function. It also makes sense, secondly, as

an exchange or interaction, which indicates the interpersonal function. And, third, it transmits a message that is recognised as a textual function. The following part introduces these (meta)functions, one by one. The first metafunction is the ideational metafunction, also known as the experiential function.

2.4.1.2.1 The Ideational metafunction. An interesting explanation of the notion of the ideational metafunction is given by Alaei and Ahangari (2016). They say: “Ideation is concerned with how people’s experience of reality, material and symbolic, is construed in discourse” and “...focuses on the content of a discourse; what kinds of activities are undertaken and how participants in these activities are described, how they are classified and what they are composed of” (p. 204).

The ideational metafunction is the level where the linguist deals with experiential meaning and logical structure. Martin and White (2005) specify that the experiential meaning, on the one hand, deals with the type of activities a participant does/did/will do. The specification of the type of processes (activities) gives indications about the speaker’s perception of the action, that is a key to see the speaker’s representation of reality and experience; that is how experiential meanings are extracted. On the other hand, logical structure cares for the interrelationship between clauses.

The following section deals with those two components of the ideational metafunction. Concerning the experiential meaning, Eggins (2004) points out that, based on Matthiessen and Halliday (1997), the transitivity system is the tool to grasp the experiential function. That is, the detection of three main aspects, as stated by Matthiessen and Halliday (1997, as cited in Eggins, 2004):

- 1- The processes that are established through the verbal group.
- 2- The participants are those (human/non-human) who/which take part in the process; that are located in the noun group.
- 3- The circumstances are the sets in which the process takes place (when, where, and how); they are found in the prepositional phrase and adverbial group.

Eggins (2004) represents the transitivity system in a scheme that is reordered with examples in the following table for better clarity:

Table 2.2: Transitivity System with Examples

Processes (verb)	Participant (Subject)	Object/ participant	Examples	
Material	Actor	Goal/Range/ Beneficiary	The writer signed the book	
Mental	Senser	Phenomenon	The writer thinks of a new novel.	
Verbal	Sayer	Receiver/ Verbiage	The writer said that writing is gift of God.	
Behavioural	Behaver	Behaviour/ Phenomenon	The writer dreamt of being well-known.	
Existential	Existent		There are rewards devoted to best writers.	
Rational	Identifying	Token	Value	Hugo is a French writer.
	Attributive	Carrier	Attribute	He is the best fiction writer in the 20 th century.

In addition to the experiential meaning and as a complement to the Ideational meaning, there is the Logical structure, that is concerned with complex clauses that are the systemically meaningful connected clauses (two or more) (Eggs, 2004). The clauses connected must be attached respectively to some norms; those norms are the systems of Logical structure known as Logical relation and logico-semantics.

Concisely, Logical relation as mentioned by Eggs (2004), is the relation of dependency or independency of two (or more) clauses, this relation is known by the term ‘Taxis’. Two different types of coordinating tools form the Logical structure: the first is independency relation (also called Parataxis), and the second is dependency relation (also called Hypotaxis).

The logical relation and logico-semantic one are interrelated in the sense that the logico-semantic relation is the description of the type of meaning between two related clauses. Thus, the logico-semantic meaning is the determination of the type of meaning the clauses mirror, either as projection or as expansion (Eggs, 2004). The projection of meaning in a clause is seen as projection of speech (locution) or projection of thoughts (idea). Expansion of meaning in a clause is the act of elaboration, extension, or enhancement.

One of the interesting and relevant parts of the book by Eggs (2004) is the set of verbs listed as tools of projection of locution. These verbs are classified as shown below:

1. the verbal process of locution: say
2. Speech functions verbal process: statements (tell, observe, announce...); questions (ask, demand...) offers and commands (call, decide, request, suggest, offer...).

3. Circumstantial verbal process: agree, boast, complain, continue, explain, interrupt, insist, protest, promise, reply, shout, vow ...

4. verbal process of writing: note down, write, put...

Expansion is the relationship where a clause elaborates, extends, or enhances the meaning of another clause. Expansion as a relation can be detected from the meaning of the clauses, where some of the tools used are conjunctions (Eggins, 2004).

Hence, the ideational metafunction is about the investigation of the informational content of the message. That can be identified by the linguist based on the Transitivity of the clause between the identification of the participants, processes, circumstances, and the relation between clauses. Furthermore, Eggins (2004) states:

“Systemicists argue that the clause's experiential meaning is realised simultaneously with its interpersonal meaning, so that the description of Transitivity in the clause complements its simultaneous Mood description” (p. 206).

This means that both the experiential meaning and the interpersonal meaning are interrelated in a way that Transitivity analysis leads to the localization of Mood, that is the key tool of the Interpersonal metafunction. This point is expanded by Eggins (2004); she highlights that the description of the process and participants must lead to indications about information exchanged and through relations between interlocutors. The following metafunction to be seen is the Interpersonal metafunction, known also as the attitudinal meaning.

2.4.1.2.2 The Interpersonal metafunction. The interpersonal meaning deals with the relation between interlocutors (speaker/addressee) (Matthiessen & Halliday 1997, as cited in Eggins, 2004), the feelings interlocutors share, and the way they interact (Martin & White, 2005). It is studied through mood and modality analyses (tone of sentences and implied attitude) (Halliday, 1985, as cited in Peyralans, 2019). Also agrees Eggins (2004) by stating that the description of the used system of Mood and Modality allows the linguist to pinpoint the nature of the relation between the interlocutors in all that concerns social position (superior/inferior), degree of closeness and familiarity, and also attitudes and judgements.

Since Interpersonal meaning analysis relies on Mood and Modality, it is important to briefly describe these two key tools of analysis. According to Eggins' (2004) published work on SFL, Mood and Modality are introduced as follows:

Mood analysis depends on the grammatical structure of the clause (subject, finite, predicator, complement...). The position of those constituents defines the clause type, where Mood is the type of clause structure (declarative, interrogative, imperative...).

Modality (modalization and modulation) analysis is the study of measurement of probability, usuality, obligation, and inclination expressed by a speaker (Halliday & Matthiessen, 2014). Therefore, Eggins (2004) confirms that communication is sometimes not a “black and white exchange” (pp. 184-185). The discussion sometimes falls into the grey zone (i.e., between agreement and disagreement, acceptance and refusal). Halliday and Matthiessen (2014) expand that the expression of possibilities as degrees of probability, like in ‘possibly/probably/certainly’ is congruent ‘to either yes or no’. Likewise, the expression of possibilities as a degree of usuality, like in ‘sometimes/usually/always’ corresponds to ‘both yes and no’.

Concerning the expression of degree of certainty, Halliday and Matthiessen (2014, p. 178) assure that “you only say you are certain when you are not”, otherwise the speaker declares the information as a fact. Thus, the use of modalization of certainty is a confession of a nuance of doubt. Differently, sees Eggins (2004), modalization is often used to express the ‘recognition of unequal power’. It is a tool to soften the uttered clause (order/obligation/command) to make it socially appropriate or polite, respectively, to the situation. This means that modalization is simply the tool to shift from offensive clauses to modulated interrogatives, or declaratives, regarding the speaker’s objectives.

Apart from expressing social respect, modality is also used to express a personal attitude in an impersonal (faceless) expression with the aim of avoiding challengeability. In this concern, Eggins (2004, p. 186) states: “The reason why this pattern occurs so much in hierarchic situations seems to be that it is a covert attempt to get people to do things without having to take responsibility for issuing the command”. Consider this example: if a security agent utters:

- 1- It is obligatory to show your ID card before entering the building.
- 2- You must show me your ID card before entering the building.

The first statement seems to the hearer to be an obligation as a measure of security taken by the administration (i.e.: no specific speaker to argue with). However, the second one makes the hearer feel a submission of order. Thus, the speaker (takes the position of superior) suspects the hearer (who feels inferior) as unsafe.

In addition to the expression of personal attitude, modality is also implicated with affect and personal traits. Eggins (2004, p. 186) indicates that the choice of intensifiers such as ‘amazingly, unbelievably’ shows that the speaker is not being unresponsive (emotionless), and vice versa.

Hitherto, both Ideational and Interpersonal were identified and presented. The following section deals with the third and last metafunction, which is the Textual metafunction that is known as the enabling and organizational metafunction.

2.4.1.2.3 The textual metafunction. It is also called Organizational function. This dimension of meaning is about describing the structural organization of a clause to make a message; thus, it deals with the coherent and cohesive structure of the text (Halliday, 1985, as cited in Peyralans, 2019). The linguistic identifiers that could be used to scrutinise the textual metafunction are thematic structures (Theme and Rheme perceptions) and informational structures (Given and New perceptions) (Berry, 1995, as cited in Peyralans, 2019). The analysis involves mostly the investigation of the structures and patterns of reference, i.e., it is the study of the structure of clauses, paragraphs, and texts (Eggins, 2004).

Halliday (1974) qualifies the textual metafunction as the ‘enabling metafunction’, given that the organization of the clause highlights the message communicated, regarding both context and the speaker’s purpose (Eggins, 2004). To put it differently, the speaker’s communicative goals could be specified through the priority given to the structure of information (familiar/new).

Hence, one of the main textual metafunction systems is Theme and Rheme (Matthiessen and Halliday, 1997, as cited in Almurashi et al., 2016). Theme is simply recognised as “the starting-point for the message” (p. 74) and Rheme as the “new information” (p. 75) given about the theme, according to Halliday and Matthiessen (2004, as cited in Almurashi et al., 2016). Theme is established as being the first element of the clause, where Rheme, consequently, is the remaining part of the clause (Eggins, 2004).

Textual metafunction analysis does not depend only on Theme and Rheme, as stated in Eggins (2004), but it is also concerned with the Informational Structure system (Given/New). This system deals with the notions of Given and New, but that falls out of the interest of this research (see Halliday and Matthiessen 2004).

Concerning the relation between the Ideational and Interpersonal and Textual metafunctions, and the conception of the context of a situation, here is the following scheme:

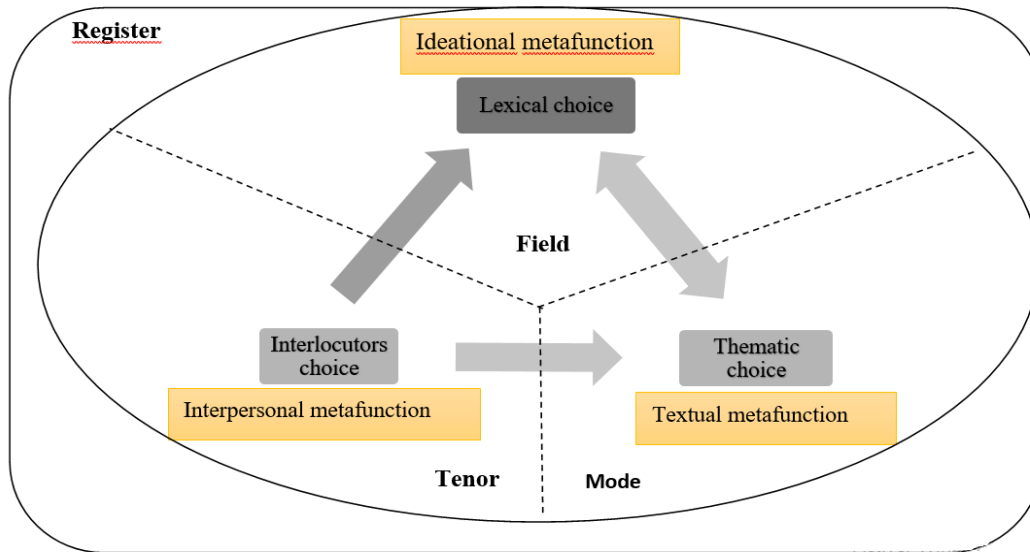


Figure 2.4: SFL Perspective Used in this Research

This schema indicates that lexical choices made by the speaker, that create the Experiential meaning, are a key element of the Field that is a part of the context of situation (Register). Moreover, Addressee choice (interlocutors) makes the Ideational meaning that identifies the Tenor (element of Register). Meanwhile, the thematic choice, that is the position of Ideational and Interpersonal meanings choices and the position of sections of the text, constructs the textual meaning that shapes the Mode (element of Register).

It must be noted that Register impacts on thematic choice. In other words, Mode as being spoken or written must cause changes in theme structure, according to Eggins (2004).

The interference of both textual and experiential metafunctions with the interpersonal metafunction, according to Peyralans (2019), leads to the elaboration of Appraisal analysis. This author argues that the consideration of Transitivity and Thematic analysis assists the linguist to extract the attitudinal function by illuminating some aspects of mood and modality. Conversely, Martin and White (2005) state that, according to Halliday (1994), appraisal analysis is the outcome analysis tool of a seminal work in which the absence of interest in feelings by SFL's interpersonal metafunction was observed.

The relevance of SFL to the present work resides in the understanding of the ideational metafunction as the lexical choice made by the interlocutor to convey a specific message. It mainly focuses on the understanding of the evidential expressions regarding the transitivity table above. In addition to the understanding of evidentials expressions as a lexical choice, SFL's interpersonal metafunction is deeply implicated with the expression of attitude.

Furthermore, SFL is also implicated with affect and personal traits that are shared throughout affect expressions.

The next theory of analysis to be seen is Appraisal Theory (AT). Appraisal theory is defined in this section, and its segments (attitude, engagement, and graduation) are presented, as classified by Martin and White (2005).

2.4.2 Appraisal Theory

In this section, the definition and segmentation of Appraisal Theory (AT) is presented.

2.4.2.1 Definition of appraisal theory. Appraisal theory is an extension of SFL, mainly expanded from the interpersonal metafunction (Peyralans, 2019). It emerged in the 1990s and 2000s as the investigation of the “potential of language to express different emotions and degrees of emotional intensity” (Ochs, 1989, as cited in White, 2011). From a simple evaluation of affect in students’ writings, Appraisal theory matured into a field of exploration of authors’ positions with the aim of relevantly classifying the text functions into societal issues (Peyralans, 2019). Martin and White (2005) add that appraisal is about the capacity to express feelings, kinds of feelings, and the manner of expression (direct, strong, explicit). This means that AT is one of the best tools to investigate affective expressions in texts.

Martin (2006, as cited in Peyralans, 2019) argues that the speaker’s position evaluation led to the segmentation of Appraisal theory. The next part is the segmentation of Appraisal theory, where each of the segments is identified.

2.4.2.2 Segmentation of appraisal theory. The appraisal framework was divided into attitude, engagement, and graduation (Martin and White, 2005, as cited in Peyralans, 2019). The reason for this segmentation was the variation and multiplicity of the speaker’s stance indicators in texts, differently from affect markers. The definition of attitude, engagement, and graduation and the schema of AT made by Martin and White (2005) come in the following section.

2.4.2.2.1 Attitude. Attitude is identified by White (2011) as the expression of ‘positive or negative positioning’ by the speaker. He shared the research conducted by a group of Australian students and Ochs (1989) that led to the conclusion that ‘attitudinal assessment’ implies something about emotions, and that it is a must to pinpoint sub-segments of attitude (White, 2011). Consequently, attitude is categorised into affect, judgement, and appreciation (Martin & White, 2005); each of these sub-categories of attitude are defined below.

Affect is the expression of emotions and feelings (already presented in part two of this chapter).

Judgement is the evaluation of behaviour regarding some norms (Martin and White, 2005) that can be religious, societal, or moral. Also, Precht (2003) sees the judgement category as the moral assessments, like the use of ‘bad’, ‘good’, ‘cool’. Judgement types are organised by Martin and White (2005) and distinguished into positive and negative norms of Normality (familiar, strange), Capacity (powerful, mild), Tenacity (plucky, timid), Veracity (truthful, dishonest), and Propriety (polite, rude).

Appreciation is the act of valuation of things, individuals, or phenomena (Martin and White, 2005). It can be distinguished into positive and negative Reaction (affection: enchanting, revolting...), Composition (perception: considered, unorganized, clear, unclear...) and valuation (cognition: helpful, useless...). On the other hand, Precht (2003) identifies appreciation as the category where the evaluation is aesthetic, like saying ‘handsome’, ‘beautiful’, or lovely’.

2.4.2.2.2 Engagement. Engagement is the speaker’s adoption of a particular position (Martin & White, 2005, p. 39). It is expressed in discourse through the use of “projection, modality, polarity, concession, and various comment adverbials” (p. 36) to indicate speakers’ position with regard to potential responses (Martin & White, 2005). Quoting or reporting are indicators on degree of engagement, in addition to denying, contradicting, and confirming (Martin & White, 2005). Peyralans (2019, p. 10) explains that engagement is mirrored in the speaker’s evaluation of the sources of information within a text. It can be seen as the perception of the speaker about the veracity of the third party’s statement. It, though, contributes in affecting the interlocutors’ perception about the message and its source.

2.4.2.2.3 Graduation. Graduation is the strengthening or the weakening of the statement by the speaker. Martin and White (2005) see it as a modulation of meaning through degree. This effect can be caused by the use of both lexical or syntactical tools (Peyralans, 2019). This is to say that graduation is realised through ‘intensified lexis’ (like using rage or fury to say anger), ‘intensification’ (‘comparative and superlative’), and even ‘repetition’, ‘graphological and phonological features’ (Martin & White, 2005, p. 37). The following schema is made by Martin and White (2005) with the aim of better figuring out AT:

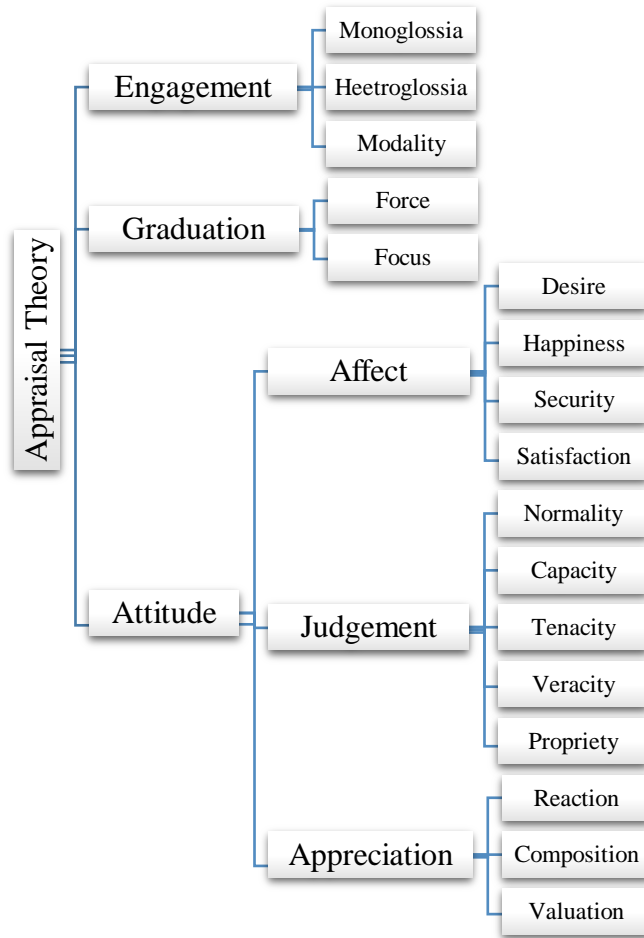


Figure 2.5: Appraisal Theory according to Martin and White (2005, p. 38)

The figure above constructed by Martin and White (2005) is not the scheme taken into consideration, because it does not answer the need of analysis. However, in this research AT is adapted as in the schema below.

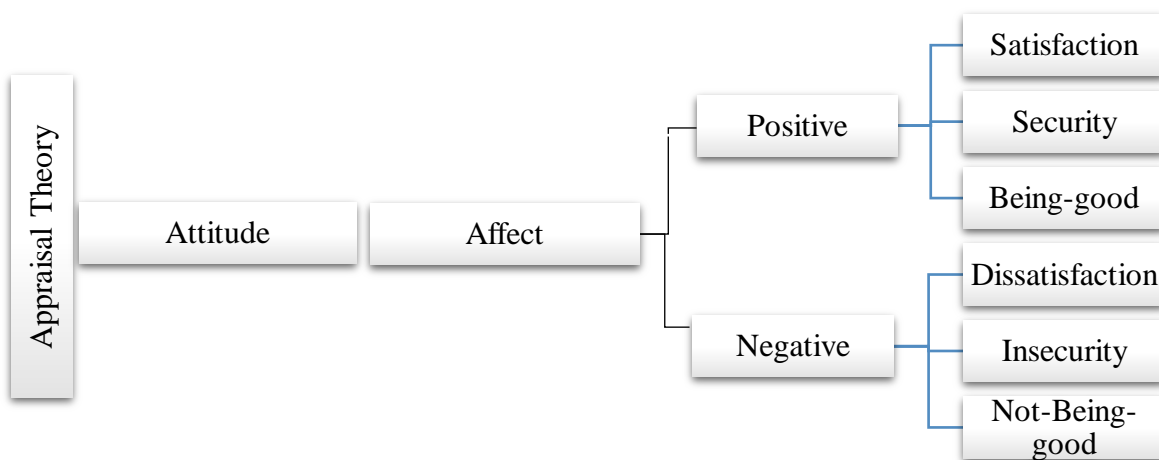


Figure 2.6: Adapted Schema of Appraisal Theory used in this Research.

As shown in the scheme above, in this research, the focus is mainly on affect expressions, where the speaker shares positive and negative impressions towards him/herself, others, interlocutor(s), and the situation. The types of affect expressions investigated are clarified in the following:

- The satisfaction affect expressions investigated in the corpus are the expressions of satisfaction, happiness, adore and flattery, i.e., all positive impression about self, others, or even a situation.
- The dissatisfaction affect expressions investigated in the corpus are the expressions of dissatisfaction, unhappiness, and dislike, i.e., all negative impression about self, others, or even a situation.
- The security affect expressions investigated in the corpus about the security and safety.
- The insecurity affect expressions studied in the corpus about threat and lack of safety.
- The being-good expressions studied in the corpus are a kind of praising expressions where the speaker or writer expresses the good deeds and good side of his/herself, entities to which he/she belongs (the institution, group, state...) and others.
- The not-being-good expressions studied in the corpus are a kind of dispraising expressions where the speaker or writer expresses the bad deeds and bad side of his/herself, group (the institution, group, state...) and others.

It is worth noting that, as pointed out by Peyralans (2019), appraisal expressions can be explicitly or implicitly communicated. The explicit appraisal form is the speaker's expression of thoughts, intuitions, or feelings, whereas the implicit appraisal form is the non-explicit expression of the 'evaluative stance' the speaker takes. Peyralans (2019) perceives the normality of unawareness about the speaker's stance shared throughout the implicit appraisal expression and the possibility of manipulateness of such expressions of the interlocutors' perceptions when he says, "It is often implicit appraisal that is gone undetected by readers and probably most affects their point of view about a subject after reading an article about it" (p. 20). So, it is possible to say that Appraisal implicit use contributes to the conception of inner-thoughts or unaware reactions to an event; or simply put, implicit use of appraisal expressions indirectly gives birth to the inclination towards the speaker's penchant. Consequently, AT analysis must reveal something about the speaker's stances (shared and non-shared) and willingness, i.e., AT analysis must be helpful in the investigation of manipulative strategy.

In addition to AT, Wodak (2007, as cited in Furko, 2017) insists on the usefulness of CDA in investigating manipulation through pragmatic markers. CDA is the investigation of

truth. Martin and White (2005) confirm that CDA works on inspecting treachery, lies, and hidden truths. These investigated norms can be revealed through experiential and logical meanings analysis, according to Martin and White (2005). This is to say that the following theory of analysis is needed in this research is Critical Discourse Analysis, presented below.

2.4.3 Critical Discourse Analysis

In this section, the Critical Discourse Analysis (CDA) is defined, and a set of its perception, and interests are reviewed.

2.4.3.1 The definition of CDA. On the emergence of CDA, van Dijk (1993, as cited in Bhatia, 2015) defines it as the study of discourse that “comprises the analysis of the text and talk in virtually all disciplines of the humanities and social sciences” (p. 17). It is the study of a discourse as a tool to cause ideological and/or behavioural changes, and social power practice, clarifies Fairclough (1992). For a better perception of this analytical method, CDA’s requires specifications that concern its perspectives and interests. The later angles are, respectively, undertaken.

2.4.3.2 The perception of CDA. CDA, as perceived by Fairclough (1992), is the study of a discourse as a communicative event at three main levels: First, Textual level, which is the analysis of discourse at word level (in verbal communication). It basically focuses on the choice of terms and the conveyed attitude. Second, Discursive practice level is the study of the why the text is produced or structured and the conveyed values and attitude towards such a structure. Third, Social practice level is where the discourse is perceived as a communicative tool for social practice of power and change.

This is to say that CDA’s analytical perspective is focalised on “the nature of linguistic evidence that indicates ideologies” (Bhatia, 2015, p. 16) “to demystify the ideological and asymmetrical power structures ... through the analysis of various semiotic data” (van Dijk, 2001, as cited in Bhatia, 2015, p. 16). And, that CDA’s critical perspective is visualised from the cultural norm. Bhatia (2012) says: “CDA draws on the critical theory as cultural critique, and focuses on social relations of domination, typically grounded in class relations, including race and gender” (p. 23). In more detail, the criticality in CDA is concerned with ‘hidden connections between language, power, and ideology, especially the way abuse, dominance, and inequality are enacted, reproduced, and resisted’, as seen by Fairclough (1989, as cited in Bhatia & Salmani-Nodoushan, 2015, pp. 125-126).

2.4.3.3 The interests of CDA. Critical Discourse Analysis focuses on the social functions of discourse as conserving or changing a status during the communicative act, as stated by van Dijk (1998, as cited in Peyralans, 2019). In this period, CDA has developed a greater focus on the relationship between interlocutors as ‘oppressor and oppressed. Consequently, CDA is adopted to investigate the strategies used through language to achieve ideological changes, as seen by Fairclough (1992, as cited in Alaei and Ahangari, 2016). Henceforth, Critical Discourse Analysis is interested in the identification of social inequalities and disempowerment. It is specifically involved with the way social practices such as dominance, discrimination, power, and control are expressed or insinuated in a text (discourse) (Bhatia, 2015). However, the concern of CDA is not restricted to the description of these social practices, but it attempts to expose the obligation of “power and ideological influence” (p. 13) in respect to beliefs and cultural norms.

Simply put, in this research, CDA is adopted as a theoretical tool of analysis to interpret the annotated expressions’ implication with manipulation for the following reasons:

- CDA investigates the way the discourse reflects the ideologies and the ‘relations of power’ (Fairclough, 1992), and manipulation is concerned about causing ideological shifts and social exercise of power.
- CDA highlights the speaker’s (or writer’s) attitude towards the social groups (Fairclough, 1992), and manipulation is concerned about the expression of perception of self and others.
- CDA cares for the knowledge and belief structure and the social relations (Fairclough, 1992), and manipulation is deeply influenced by social positions and cognitive esteem.

Furthermore, CDA pays attention to the lexical choice and expression of attitude, which fall under the main objective of this research, which is to investigate the contribution of affect and evidentials in the manipulative practice. The following subsection discusses the intersection of Critical Discourse Analysis with both Systemic Functional Linguistics and Appraisal Theory.

2.4.4 The interaction of CDA with SFL and AT

Fairclough (2010) sees that one of the elements of CDA is that it can be considered as a systemic analysis of text. Since he (Fairclough, 1992, as cited in Peyralans, 2019) perceives text as a corpus of three dimensions:

Text as a lexical and syntactical choice made by the user.

Text as a communicative interaction between interlocutors.

Text as social interaction produced with the aim of achieving changes.

These three dimensions of text perceived by Fairclough (1992) are closely related to Halliday's perception of language in SFL. Simply put, language is seen as a functional tool in the service of social communicative events and language users' objectives.

When talking about social events and speaker's objectives, the talk is mostly about interlocutors (identity, knowledge, position...), social settings (time, place, event, face-to-face talk, in public discourse, letter...) and communicative goals (the changes the speaker aims to accomplish). Both CDA and SFL work on revealing those details from a text. Fuoli (2015) points out that many studies made by Fairclough (1992, 2003), van Dijk (1991), van Leeuwen (1996), and Wodak (2001) agree on the insight that SFL based CDA is the consideration of Ideational indicators in discourse through Transitivity and other factors. In this concern, Halliday (1997, as cited in Zienkowski, 2011) praises CDA-SFL as a tool analysis for the study of discourse. And, since AT is a derivation from SFL, so the combination would give birth to an efficient tool. Similarly, Peyralans (2019), in his research, recommends the use of AT for CDA analysis. In the next section, the framework used in this research is presented.

2.4.5 The framework used in this research

The three approaches to language SFL, AT and CDA, as mentioned by Peyralans (2019), can be used together in a way that: SFL works on extracting data correspondingly to the metafunctions of language used, while AT focuses on studying speakers' attitude and shared stance; whereas, CDA cares for shaping the idea about speakers' stance and linguistic features of the discourse, respectively, to the social event. Consequently, the strategy taken to develop the communicative act and treat the whole topic can be exposed.

This is to say, in this research, the corpus is to be studied through SFL and AT for data categorization and analysis, and CDA for data interpretation and discussion. The following shows the way these theories are to be used in this research.

SFL is the tool for evidential expressions categorization. Transitivity is used to highlight Process, participants, circumstances, and goals, or phenomena (if needed). This is to make a distinction between processes and the way the facts and experiences are exposed. At this level of analysis, evidential markers (verbs, adverbs or phrases) are to be seen according to Chafe's (1989) scheme modified by Ifantidou (2001), i.e., evidential markers are categorised to: Belief, Induction, Sensory Hearsay and Deduction. However, Belief evidentials are categorised to subcategories: Thought (thinking markers), Conviction (a subcategory of markers of belief and faith, it is called so to not be confused with Belief as a category), and the knowledge (knowing

markers). Furthermore, Induction and Deduction are gathered as Inference as a category but differentiated when annotating and analysing. At this level also, participants appear on the surface to see the perception of interlocutors: speaker(s)/writer(s) (I/we) and hearer(s)/reader(s) (you), and also others (they/he/she).

In detail, SFL contributes to the scrutiny of Evidential markers, that consists of the identification of those markers and their function regarding the Transitivity system. This is to say that Belief Markers are studied as a Mental process, where the expresser of Belief is taken a Senser participant and the information is the believed phenomenon. Other cases of non-explicit expression of belief are also being taken into consideration. Consider these examples: 'I believe that the earth is flat'. This example is an explicit expression of belief. However, the speaker could choose to use another form to express the belief in flattered earth differently, like saying: 'I'm more to be a flatter'. This is why the manual investigation of the corpus is a must.

Similarly, to Belief Evidential Markers, some Sensory Markers can also be considered as Mental process since some sensory acts cannot be controlled, like (seeing, hearing, and smelling). However, the other sensory acts can be controlled, like (tasting and touching). Thus, Sensory Evidential Markers work as Mental and Material processes. Consequently, the Participant can be Actor or Senser, and the object can be an action or a Phenomenon. In the same way, sensory expressions could also be implicitly expressed. Consider this example: 'I saw a bruise on her face'. This example can be expressed differently. The speaker could also express Sensory mode of knowing with no evidential marker, like in 'The makeup did not hide the bruise on her face', in such a case the sensory act of seeing goes implicit.

However, Induction and some of Deduction Evidential Markers fall out of Transitivity system interest. Induction Evidential Markers are a set of Certainty adverbs and the modal verb 'must' that fall under the scope of Modality. Yet, some of Deduction Evidential Markers work as Mental process.

Unlike the previous Induction and Deduction evidentials, Hearsay fits a specific process in Transitivity system known as Verbal process. In this process, as mentioned earlier, the participants are mostly individuals in the roles of speaker/hearer or writer/reader are perceived as reporter, reported, and receiver. This is to say that the analysis table of Evidential expressions annotated (Appendix B) in the analysed corpus are to be tabulated according to the table below:

Table 2.1: Scrutiny Table used in this Research

Participant	Evidential Marker:		Information
Expresser: Believer Thinker Deducer Senser Reporter Reported Receiver	Evidential Verb: Mental Process Material Process Verbal Process	Evidential utterance: Adverbs expressions	belief expressed: Phenomenon Belief Thought Inference Sensory phenomena Verbiage

Differently from Systemic Functional Linguistics interests in discourse, Appraisal Theory is the investigation of speakers' attitude out of the affectual situation expressed. In order to illuminate these elements, the Affect Markers data are extracted through the manual annotation of the discourse and classified with regard to the affectual meaning to positive affect expressions: satisfaction, security, and being-good, and negative affect expressions: dissatisfaction, insecurity, and not-being-good. These affectual expressions are used with the aim of investigating the (dis)satisfaction of the interlocutors concerning the critical situation discussed in the corpora studied, and the (in)security expressions are reviewed regarding the topic that concerns the breach of privacy and Russian break into Facebook platform, whereas the (not)being-good expressions are used to investigate the positives and negatives of parties, persons, and actions.

In this research, Critical Discourse Analysis is the building instrument of the interpretations, and conceptualization of results by which the textually conveyed meanings and attitudes of evidential and affect markers, discursive (structural) practice of the evidential and affect expressions and their implication in the communicative event as a social practice are discussed. This procedure leads undoubtedly to highlight interlocutor's relationship and the discursive strategy adopted in these corpora. It also highlights the social issues discussed throughout evidential expressions.

To achieve a successful analysis of the corpora and avoid falling in misevaluation of genre, regarding Bhatia's note "[a]ny attempt to consider genres as social practice will essentially blur the nature of analysis, and hence may not be adequate or effective for genre theory" (2015, p. 15). To apply CDA on a genre, Genre Analysis must be the best annexe to effectively reach research objectives. In the following section, Genre Analysis (GA) is discussed.

2.4.6 Genre Analysis

Before dealing with Genre Analysis, the notion of Genre should be revisited. Genre is a French word in the meaning of ‘kind’ (Chandler, 1997). It is defined as “a conventionalized and largely standardised communicative event defined in terms of its communicative purpose that a genre is meant to serve in a specific academic or professional setting” (Bhatia & Salmani-Nodoushan, 2015, p. 122). Simply put, genres are the kinds of communication events distinguished in regard to the communicative purposes of the event itself. Or, it can be defined simply as the used language in achieving specific purposes in specific professional, institutional, or academic communicative events. Though it is worth being mentioned, genres are not static and determined, but rather dynamic and hybrid. Unfortunately, for the sake of avoiding exaggeration in length and details in this chapter, this point is not going to be discussed. Hence, the next section defines and points out the main aspects to be investigated through GA.

Genre Analysis is satisfactorily clarified by Bhatia, in his interview with Salmani-Nodoushan. He says:

“Genre Analysis is only a way of analysing, interpreting, and accounting for some of the discursive actions taking place in specific academic and professional contexts, and considers context and any form of specific genre knowledge as an important contributor to its understanding of genre.” (2015, p. 122).

This is to say that GA is retrieving the discourse based on the investigation of the circumstances in which the specific communicative event occurs/occurred. In reference to the circumstances, Bhatia and Conard (2009) affirm that the analysis of “situational characteristics” is a must in Genre Analysis. Bhatia (1987) lists these situational context characteristics as the following:

- Communicative purpose.
- The settings or context in which it is used.
- The communicative events or activities that are associated with it.
- The social or professional relationship between the participants taking part in such activities.
- The background knowledge that such participants bring to the situation in which that particular event is embedded.

Hence, the analysis of the corpus in this research lays on CDA framework in respect to GA situational characteristics. In the next chapter more details about the analysis method, tools, and process are revealed. Though, before passing on to the methodology used in this research,

knowing about the register and genres used is essential. Thus, research on Legal Discourse is the next and last section of this chapter.

2.5 Research on Legal Discourse

In this part of the chapter, all of Legal Discourse (LD), Hearings and Legal Letter are defined and categorised. Legal Discourse is seen as a Register, while Hearings and the legal Letter as Genre are studied in the following subsections. The Hearings are reported in this research from a document of Hearings in the U.S. Senate: A Guide for Preparation and Procedure (published in 2010 by an Analyst on Congress and the Legislative Process with a redacted name).

2.5.1 Definition of Legal Discourse

Legal discourse is the language used in the legal field (Zhenhua, 2016). This is to say that all of written, spoken, or non-verbal language about legal phenomena is concerned as legal discourse (Chenga & Danesib, 2019).

2.5.2 Types of Legal Discourse

The categorization of legal language is undetermined because of the diversity of this later. Both Tiersma (1999) and Goźdz-Roszkowski (2021) put emphasis on a set of factors of variation: the geographical location, the authority for which the corpus belongs (this is to say the corpus is a document of the federal or state authorities), the type of document (be it ‘judicial decisions’, ‘law reports’, ‘wills’ etc.), and the mode of corpus as being written (like journals, lawyer contracts) or oral (like witness investigation, witness testimonies, ‘jury summation’). Despite the remarkable variation in Legal Discourse, Bhatia (1993, as cited in Goźdz-Roszkowski, 2021, p. 1528) asserts that the classification of legal discourse must basically be built on the mode (written/spoken) and the functional category that mainly depends on the communicative purpose and settings of the legal discourse. Unlike, Tiersma (1999, as cited in Goźdz-Roszkowski, 2021) sees that the categorisation of legal discourse should purely be conceived on the communicative purpose of the legal corpus to: operative legal documents (e.g., contracts), expository documents (e.g., judicial opinions), and persuasive documents (e.g., memoranda). Nonetheless, Johnson and Coulthard (2007, as cited in Johnson, 2014) distinguish legal discourse depending on the use of the legal corpus as legal process or language as evidence. The legal discourse that concerns legal process is the kind of legal language used during a legal process, like all of Judges language, criminal trails, police interviews, and lawyer consultation, whereas, language as evidence is the discourse used in cases like blackmail, suicide letters, plagiarism and authorship, and voice identification.

This is to say that for the identification of the type of the legal discourse chosen for this paper, the factors of variation are to be taken for the norms of categorisation. Hence, the questions to be answered for the determination of the types of a legal discourse concern the location, authority, communicative purpose, the use (as evidence or process) and the mode (as spoken or written).

The diversity of legal discourse, the voluminous legal corpora, and its availability must be one of the reasons for which legal discourse got the interest of researchers, sees Goźdz-Roszkowski (2021). In this research, the interest falls on the two different genres of witness testimonies at Congress, known also as hearings (spoken discourse), and an academic letter to congress (written discourse). The following section clarifies the two genres and their structures. The first subsection represents the hearings.

2.5.2.1 The hearings. In the following section, the hearing is defined and its strategic statements are listed and defined.

2.5.2.1.1 The definition of hearings. One of information gathering techniques Congress uses is Hearings. Congress works on sharing judicial issues, it seeks to solve them with Senators, Senators' staff and public in form of Hearings (name redacted, 2010). Hearings' processes are similar regarding Senate Rule XXVI, still, a hearing can be handled differently due to committee decisions regarding questioning turns, types of hearing, and committee setting of Congress's rules (see Hearings in the U.S. Senate: A Guide for Preparation and Procedure).

2.5.2.1.2 Types of hearings. Hearings are classified regarding the purpose into: Confirmation, Legislative, Oversight, and Investigative (2010).

In this research, the hearings taken into consideration are Investigative hearings. Investigative hearings are the "Congress's stated determination to investigate, usually when there is a suspicion of wrongdoing on the part of public officials in governmental operations or of private citizens in business or other activities" as stated by Carr (2006, p. 6) (cf. Thomas P. Carr, Cong. Research Serv., RL30539, Hearings in the House of Representatives: A Guide for Preparation and Procedure 4-5 (2006)).

2.5.2.1.3 Hearings structure. As stated in (Hearings in the U.S. Senate: A Guide for Preparation and Procedure) "The vast majority of committee hearings are open to the public, as required under Senate rules" (2010, p. 17). Generally, hearings are composed of Opening statement, Questions and a closing statement. In the following, those three phases are presented, respectively.

2.5.2.1.3.1 Opening Statements. The opening statement is presented by the chairman and organised as follows: first, presenting the issue, goals of the meeting and factors leading to this event. Second, settling Congress rules, like questioning order, interruption procedure, limitation of time (if any) and future scheduled sessions. Third and last, giving the word of opening to minority members and senators (reduced name, 2010). After the opening statements, the committee passes to the interrogation phase, which is questioning.

2.5.2.1.3.2 Questioning. Concerning questioning, committee members agree on a system of order (seniority order, early bird order or others), meanwhile, the chairman can interrupt the order and questions the witness. The committee is also concerned with defining the circumstances under which the witness can be interrogated by the staff, if allowed to (reduced name, 2010). Questioning can take long hours until the chairman decides to close the hearing and announce it in a closing statement.

It is worth noting that questioning in legal discourse, as perceived by Johnson (2002), Gibbons (2003), Archer (2005), Newbury and Johnson (2006), and Jones (2008), is a set of two types of questions: information-seeking and confirmation-seeking questions. After dealing with the questioning stage, the closing statement is a must to close the section. The following subsection presents the meaning of the closing statement.

2.5.2.1.3.3 Closing statement. The chairman is supposed to close the hearing in a statement where he thanks the witnesses, the senators, the staff, and experts present. The cloture of a hearing can also be decided through a vote when the hearing touches one of the closing reasons made by the Senates' rules (Rule XXVI, paragraph 5) as involving national security information, committee personnel, individuals' privacy, law activities or law confidential regulations, confidential financial or commercial information (Rule XXVI).

To wrap up, the hearing is composed of opening, questioning and closing statements. The second type of genre used in this research, that is Legal Letter is presented in following subsection.

2.5.2.2 Legal letter. In this section, the Legal academic letter is defined and its structure is exposed. The types of the letter are limitless depending on the addressee, purpose and other norms.

2.5.2.2.1 The legal letter definition. Legal Academic Letter is the written corpus addressed to a specific party, such as an opposing party, client, congress, court... (GebreHiwot, 2009). The structure of the Letter is presented in the following subsection.

2.5.2.2.2 Structure of the legal letter. Like any academic Letter, it is composed of introduction, development and conclusion as states by Booth (2018), in addition to the address, title and heading. As presived by Booth (2018), the introduction is the part where the writer states for which reason or purpose the letter is written. And, the development is the longest section of the letter, where the writer develops or responds on the issue. And, finally, the conclusion is the part of the letter where the development is summarised.

After reviewing the legal discourse as research corpora's register. The following section briefly defined the domain in which research is applied to Legal discourse and the present research falls under its scope, called Forensic Linguistics.

2.6 Forensic Linguistics

Since the Hearings and the Letter studied in this research are communicated in response to a legal process, so this research is concerned with Forensic Linguistics. Forensic Linguistics is simply defined as the study of use and abuse of language in a legal process, as stated by Coulthard and Johnson (2007).

All of Manipulation, Affect, Evidentiality, the framework, Legal Discourse and Forensic Linguistics are dealt with in the ongoing chapter. These points are highlighted in the next section, that is the conclusive section.

Conclusion

This chapter is where all of the used notions, terms, theoretical tools, and corpora's register and genre are discussed. In this chapter, Manipulation as a phenomenon is reviewed and all of its social, psychological, linguistic and cognitive mechanisms are exposed, in addition to the types and strategy of manipulation.

Additionally, affect and evidentials are discussed and categorised depending on the requirements of the research. Specifically, affect markers are categorised into (dis)satisfaction, (in)security and (not) being-good. However, evidential markers are categorised into belief (Thought, conviction and knowledge), induction, sensory, hearsay, and deduction.

The theoretical framework adopted focuses on affect expressions that are approached regarding the Appraisal Theory and Evidential expressions that are scrutinised in regards to Systemic Functional Linguistics. Whereas, the results are negotiated correspondingly to Critical Discourse Analysis perception of the text and social communication. The methodology of analysis is further tackled in the following chapter.

Chapter Three: Methodology

Chapter Three: Methodology

Introduction

This chapter presents the methodology of analysis followed in this research. It consists of all details that concern the corpus studied, tools and method used, and data analysis procedure undertaken. This study involves a computational corpus analysis; thus, it is a corpus-based method (specifically, corpus-assisted method). The first section of this chapter defines Corpus Linguistics. The second section introduces the corpus used in this dissertation and its selection motives. The third section is the presentation of the analytical tools, where both quantitative and qualitative methods are defined and the way these methods interact in this research is detailed. The fourth section consists of data collection and data analysis procedures.

3.1 Corpus Linguistics

Corpus linguistics is known as the analysis of a text using computational tools. Goźdz-Roszkowski (2021, p. 1535) identifies this method as being “any computer-supported analysis” of texts.

Corpus-based analysis varies according to the method of analysis adopted by the researcher. Tognini-Bonelli (2001; cited in Goźdz-Roszkowski, 2021) distinguishes three main different methods: Corpus-based, corpus-driven, and corpus-assisted methods. Goźdz-Roszkowski (2021) identifies those approaches as follows: (1) Corpus-based analysis as the confirmation or elimination of a hypothesis based on investigating a specific corpus. (2) Corpus-driven analysis is a discovery method, i.e., the analysis of a corpus that ends up with the information that leads to “a phenomenon with no prior assumptions” (p. 1517). (3) Corpus-assisted analysis is “eclectic and the researcher is encouraged to draw upon various analytical techniques, apart from the corpus methodology, in an effort to achieve the desirable results” (p. 1518). This is to say that this approach of analysis is the use of computerised results (quantitative data) as a corpus for a qualitative analysis (see Goźdz-Roszkowski, 2018c).

In this research, a corpus-assisted method is adopted because the corpus is analysed using computational and other theoretical tools. The quantitative analysis serves in the identification of the frequency of each type of Evidential and Affect expressions relatively to the participant (actor, senser, speaker...). The frequency of occurrence of these linguistic features is calculated by means of the UMA corpus tool. The qualitative analysis is used for interpretation of the functional use of these linguistic features (EMs and AMs). This

interpretation is based on three main approaches to language: Systemic Functional Linguistics (SFL), Appraisal Theory (AT) and Critical Discourse Analysis (CDA). The interpretation takes into consideration genre characteristics and requirements.

More precise results can be achieved through computational tools, as advocated by Triki and Sellami-Baklouti (2002). However, this study uses the mark-up technique to investigate undetermined Evidential and Affect Markers by the automatic computational tool; i.e.: the implicit use of EMs and AMs cannot be determined by the used tools; nor could these tools define those linguistic features automatically from texts with no human assessment. It should also be admitted that the taxonomies investigated are imperfect and/or some EMs and AMs could be unexpected or infrequently used.

Corpus-based analysis lives a revolution in the Legal field. Most of the linguistic studies done on Legal Discourse (Legal Language) are Corpus-Based types of research (c.f.: Goźdz-Roszkowski (2021)). Both Bhatia (2004) and Goźdz-Roszkowski (2021) agree on the fact that a legal corpus is an interesting yard for the Corpus-based method. In this perspective, the corpus of this study as being a legal corpus is to be undertaken. In the following section, the corpus under study is presented and described, and the reasons for its selection are listed.

3.2 Corpus of the Study

The corpus used in this research is a legal corpus. The hearings of a witness by a committee and a letter in the same context sent by the witness's team answering some of the non-asked questions during the hearings. As shown in the chart below:

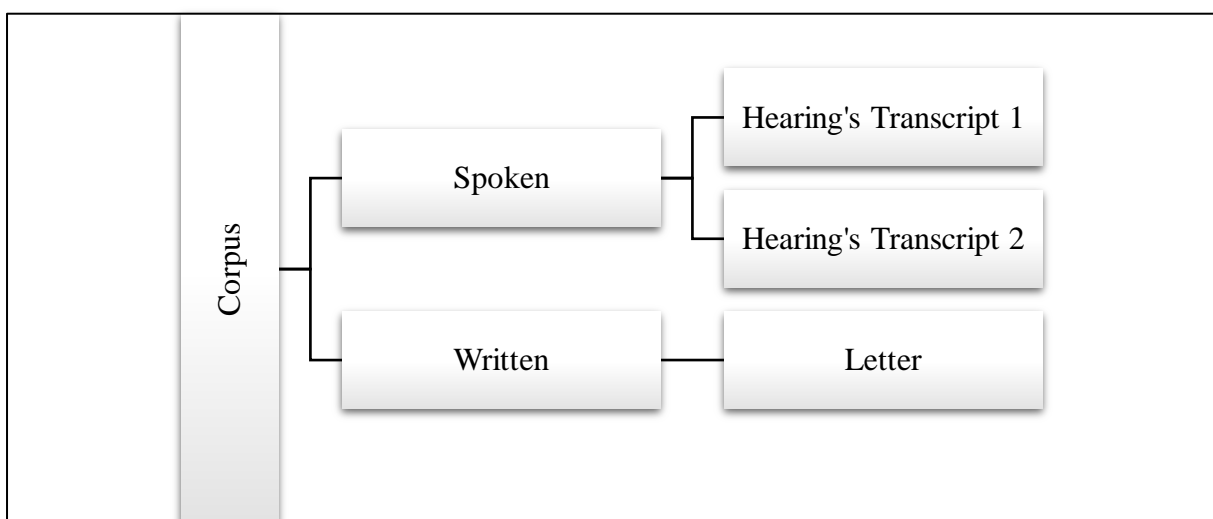


Figure 3.1: Corpus of the Research

3.2.1 Corpus Description

The corpus of this research is a set of three files, two are transcripts of an oral corpus, and one is a written corpus. The files are two transcripts of testimonies of Facebook chief executive Mark Zuckerberg facing the Senate's Commerce and Judiciary committees, and the third is a Letter sent to Congress committee members by Inc. Facebook. In the following, the three files are presented:

3.2.1.1 First transcript. The first transcript covers the first hearing on Tuesday 10th of April, 2018, with the aim of treating the issue of data privacy and Russian disinformation on 'Facebook' social network. The panel members were 27 members of the Senate Commerce, Science, and Transportation Committee and 21 members of the Senate Judiciary Committee. The hearing was chaired by Chairman Charles E. Grassley and Chairman John Thune. The transcript of the hearing is a set of 360 questions and answers. It was a trend because Mr. Zuckerberg expressed in public his apologies and defended the tech giant amid controversies over data privacy. It is composed of 150 pages and 45332 words (as calculated by the UMA corpus tool), as shown in the following table:

Table 3.1: Representation of the First File.

First transcript	Number
Pages	150
Questions	360
Words	45332

3.2.1.2 Second transcript. The second hearing was on Wednesday 11th of April 2018 entitled "Transparency and Use of Consumer Data". The committee was composed of 54 members, presided over by Senator Greg Walden (as chairman of the committee), and 41 members as present staff from different departments like the Director of Communications, Deputy Staff Director, Chief Counsel, Digital Commerce and Consumer Protection, and Minority Policy Analysts. The Senators asked 360 questions concerning Facebook users' privacy. The transcript file is composed of 224 pages, which is a total of 49155 words (as calculated by the UMA corpus tool), as represented in this table:

Table 3.2: Representation of the Second File.

Second transcript	Number
Pages	224
Questions & Answers	340
Words	49155

The Hearings’ transcripts are dealt with in detail in this subsection. In the following subsection, the third file used in this research, namely the Letter, is presented.

3.2.1.3 The letter. The third file is a letter sent to the committee of the Senates of Commerce and Judiciary Affairs on 29th June 2018. The file is composed of 912 pages, 747 questions, and a total of 375 486 words, as embodied in the following table:

Table 3.3: Representation of the Third File.

Item	Number
Pages	912
Questions & Answers	747
Words	375486

This means that the whole corpus of research is composed of 1286 pages, 747 questions and answers, and 469 973 words, as detailed in the following table:

Table 3.4: Representation of the Volume of the Corpus.

	Written	Oral	Corpus
Number of Pages	912	374	1286
Number of Q/A	747	700	1447
Number of words	375 486	94 487	469 973

These sets of files have been chosen for several reasons that are listed in the section below.

3.2.2 Corpus selection motives

This corpus is selected for the following motives: First, the application Facebook (called Meta at the time being) is making a huge part of people's lives, about 2,912 billion persons have Facebook accounts and 1,929 billion active accounts per day, according to calculations done by Google in February 2022. Second, the testimony was one of the most important events of 2018. Third, it represents a trend where the CEO of Facebook was for the first time interrogated. Fourth, the speaker's face at the congress was so frozen that affect and evidential markers investigation in his discourse seems interesting. Fifth, the CEO of Facebook is, regarding his brilliant career and achievements, a very smart person, so much so that the analysis of his answers while being interrogated must show an interesting strategy to provide less/informative and ir/relevant answers to the questions. Expectedly, the deception or manipulation in such people's discourse is not easy to detect. Sixth, the hearing gathered many important issues depending on politics, social media (safety), and a person's of influence on perceptions and beliefs. Seventh, the testimony caused a huge media debate between the weirdness of the CEO of Facebook (the witness) and the incompetence of some jury members in Technology. Eighth, the availability of the testimony in the form of recorded videos and transcripts.

In this section, the corpus has been presented and described, and the reasons for its selection have been listed above. In the following section, the analytical tools used to study the corpus are presented and explained.

3.3 Analytical Tools

This section introduces the analytical tools and methods used for the analysis of the corpus. For this purpose, a mixed method is adopted. The utilisation of both quantitative and qualitative types of analysis is essential for better results. This is to say that the quantitative method is employed, as a first step, to extract the frequently used types of evidential and affect markers in relation to the speaker. The qualitative method is an explanatory continuum of quantitative results. This means that the qualitative method is the descriptive, interpretative, and explanatory part of the numerical results obtained from the quantitative analysis.

Unlike qualitative analysis, that focuses on the speculative observation and evaluation, the quantitative analysis gathers all of the computational and mathematical tools used in this research. Since the first phase of analysis is the quantitative analysis, so it is presented in the following section.

3.3.1 Quantitative Analysis

The quantitative analysis is “data collection” and data numerical representation (Dörnyei, 2007). In other words, the quantitative method consists in transforming texts into “quantitative data” with the aim of applying “statistical tests” (Triki & Sellami-Baklouti, 2002, p. 37). This research method is adopted for its “fixed and well-determined findings” (Dörnyei, 2007, p. 4).

The quantitative analysis, in this research, consists of the determination of the frequency of each of the investigated markers. This lexical analysis indicates the frequency of use of evidential expressions that indicate the source of knowledge and mode of knowing, and affect markers that denote the speaker’s communicated emotional status and appraisal values. The perspective of each of these investigated markers has already been framed in Chapter two. Thus, the determination of the frequency of use of each type of evidential helps in highlighting the highly used source of knowledge and mode of knowing, while the frequency of use of affect markers contributes to the communication of speakers’ status, stance, and perceptions of the communicative event. Consequently, the quantitative analysis helps in detecting the global impression made by speakers in both oral and written corpus, in addition to the social position adopted by the speaker.

For the fulfilment of these results, the UMA computational corpus tool analysis is used. This type of research (Computational corpus analysis) is known as the use of computational analysis tools (applications) in the analysis of a linguistic corpus. It is worth clarifying that there is a field of research called Computational Linguistics that is discussed in the following subsection.

3.3.1.1 Computational linguistics. Computational linguistics, as identified by Triki and Sellami-Baklourt (2002), is the determination of the way of use of computational tools for corpus analysis. It (computational linguistics) almost shares the same definition as Corpus Linguistics. Goźdz-Roszkowski (2021) believes that Corpus Linguistics cares more for the methods used for the analysis, whereas Computational Linguistics cares for the used tools. The aim of this field is to achieve human-like language processing, i.e.: Computational Linguistics works on treating a huge volume of corpus using computerised tools of analysis to obtain a better and faster achievement of results.

The chosen computational tool for the analysis of this corpus is, as mentioned earlier, the UMA corpus tool. This tool is presented below.

3.3.1.2 The UMA corpus tool. In this subsection, the UMA is defined, its functional phases are presented and its role in this research is highlighted.

3.3.1.2.1 The UMA Corpus tool definition. The UMA Corpus tool is a free software available on the official website <http://www.wagsoft.com/CorpusTool/>. This Corpus tool can be used on Macintosh and Windows computer-programmes (O'Donnell, 2008a). The UMA Corpus tool is identified by its designer M. O'Donnell as “a set of tools for the linguistic annotation of text” (O'Donnell, 2013, p. 2). It is specially designed for linguists and computational linguists (O'Donnell, 2008b).

In this research, the UMA corpus tool Version 6.2 is used. This version was released in February 2022. The designer comments, above the downloading button, that this version “represents the current state of UAMCT, with better visualisation, better integration with NLP software (parsing and tagging in 70 languages)”.

3.3.1.2.2 UMA corpus tool functional panes. The UMA corpus tools functional panes (tools) are:

3.3.1.2.2.1 Start New Project pane. It is a button where the project of research gets started by giving a name and choosing the holding folder of the project.

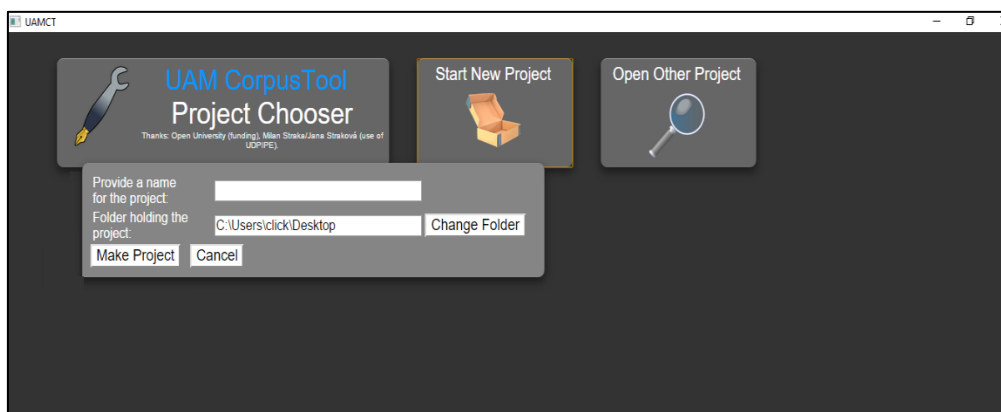


Figure 3.2: The Opening Window of the UMA Corpus Tool (version 6.2)

3.3.1.2.2.2 Files pane. It is where the corpus, in the format of TXT only (O'Donnell, 2008a), is to be added for the analysis. It can normally be added as files, folders, or pasted texts. However, in this version, texts can only be pasted. The name of the file, the sub-corpus of the file, and its language are chosen before the storage (incorporation) of the file, as shown in the figure below.

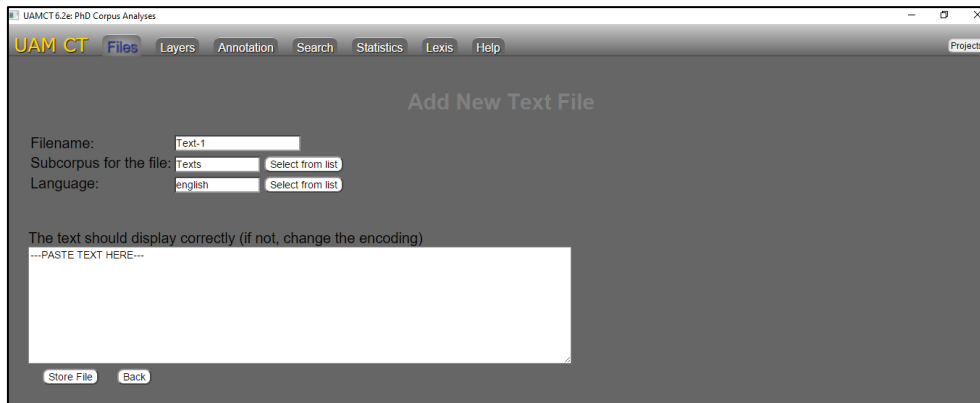


Figure 3.3: Files Window for Adding a Text File

3.3.1.2.2.3 Layers pane. It is the space where the patterns of analysis of the corpus are chosen. The layer is designed in a scheme. “A Layer is a type of analysis of the text files. We can add layers for coding clauses, for coding groups, for the register of the whole text, for appraisal analysis, etc.,” says O'Donnell (2013, p. 11).

Furthermore, a Layer is used for the automatic or manual annotation of the corpus, as shown underneath:

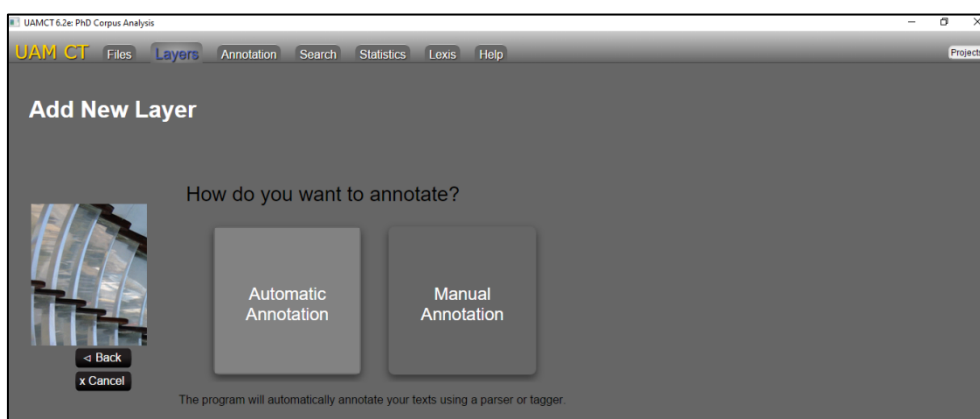


Figure 3.4: Layers Selection or Building Schemes Window

The Automatic Annotation concerns all Parts of speech, Grammar, Event-semantics, Modality and Intensifiers, whereas Manual Annotation gives the choice to use a built-in scheme, design a personal scheme, or ‘reuse a user-specified scheme’. The ‘Use Built-in Scheme’ gives access

to the ‘Appraisal Analysis’ set of schemes shown in the figure below and ‘Error Analysis’ schemes.

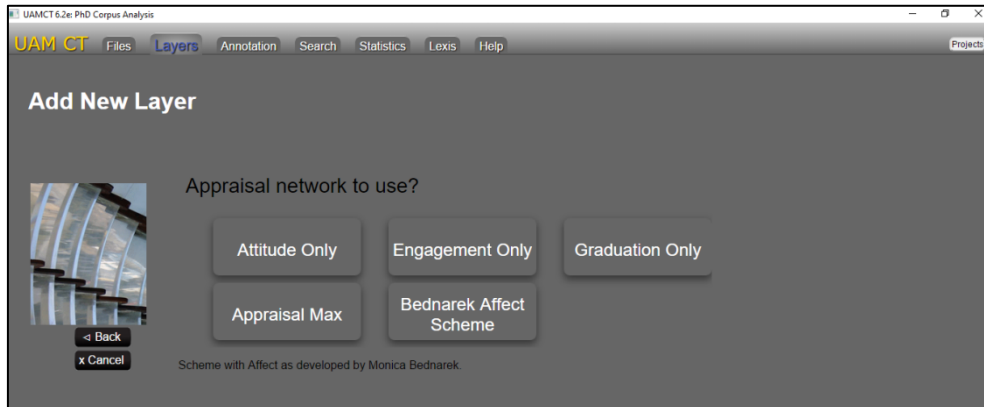


Figure 3.5: Appraisal Analysis Layers Window

Here, the ‘Design Your Own’ scheme button gives the access to, first step, the choice of design a layer that can be used for the annotation of the whole file or parts of the file, as this screenshot shows:

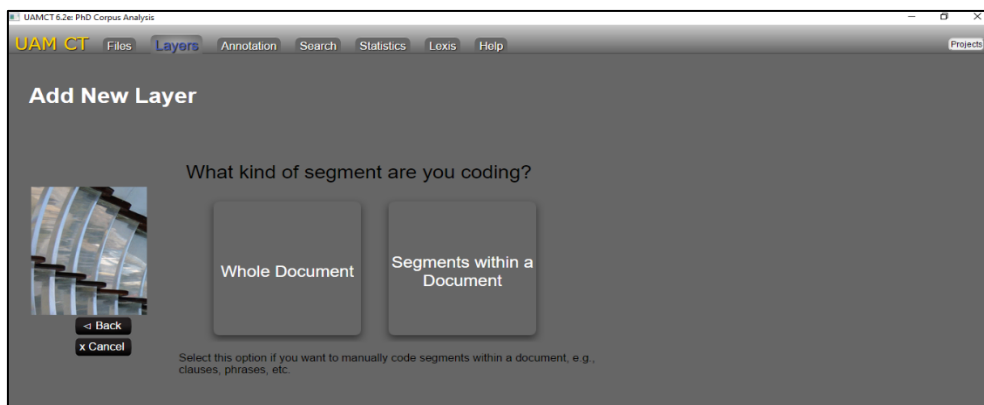


Figure 3.6: First Step for Designing Specific Scheme Window.

If the annotator (linguist) chooses ‘Whole Document’, the second step is to name the layer and design it (as seen in figure 3.7). However, if the linguist chooses ‘Segments within a Document’, the second step is to choose the type of layer needed for the manual segmentation, as shown in the figure below:

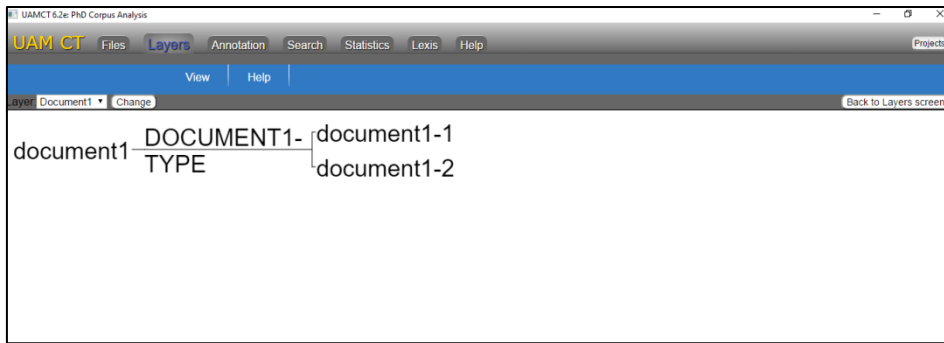


Figure 3.7: Layer of Whole Document Annotation Window

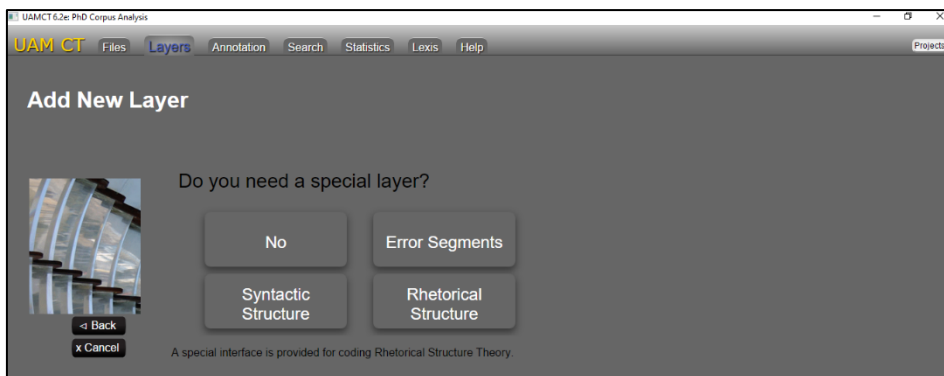


Figure 3.8: Manual Layer Design Window

The choice of any of those panes, except ‘Syntactic Structure’, leads to the following screenshot of window, that helps in the specification of the needed segments for analysis.

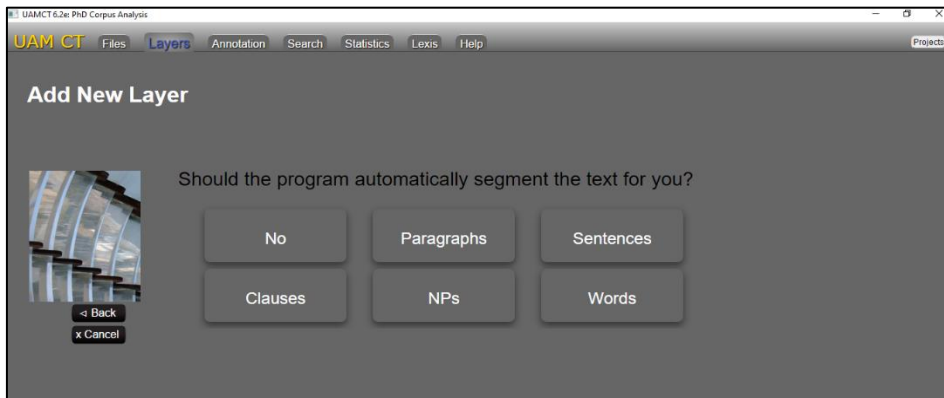


Figure 3.9: The Choice of Segments of Annotation Window

3.3.1.2.2.4 Annotation pane. The annotation depends on the layer chosen. Many options of saving, printing, and others are handed.

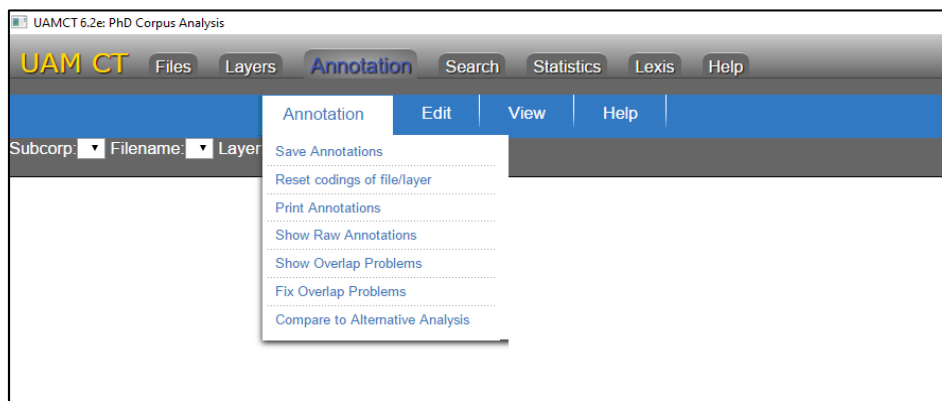


Figure 3.10: The Annotation Pane Window

3.3.1.2.2.5 Search pane. This pane serves in the searching in the annotated files, for structure (like passive or mental verbs) that must be specified by the researcher. The researcher should use a specific coding (like the code 'be% @participle' to search all structures of 'be' followed by 'participle verb' or the code '@mental-projecting' to search all verbs classified as mental) (O'Donnell, p. 2013). However, it does not help in the investigation of a list of words, like it is demanded in this research paper. The screenshot below shows the Search pane window, the search bar, and the results screen in white.



Figure 3.11: The Search Pane Window

This functional pane is used in the extraction of the lists of annotated expressions to qualitatively study them.

3.3.1.2.2.6 Statistics pane. This pane helps in developing from the annotated corpus tables, barcharts, piecharts, and even cluster view system. To outline these statistical demonstrative tools, all types of study (description, comparison), aspect of interest (lexical patterns, feature patterns, or wording), and unit of interest (annotating Layers added and their annotating features) are selected by the researcher (as shown in Figure 3.12). In addition to those optional linguistic features, statistical tools are also used. One of the most common statistical tools used is the Chi-square test, that is briefly explained as a sub-section.

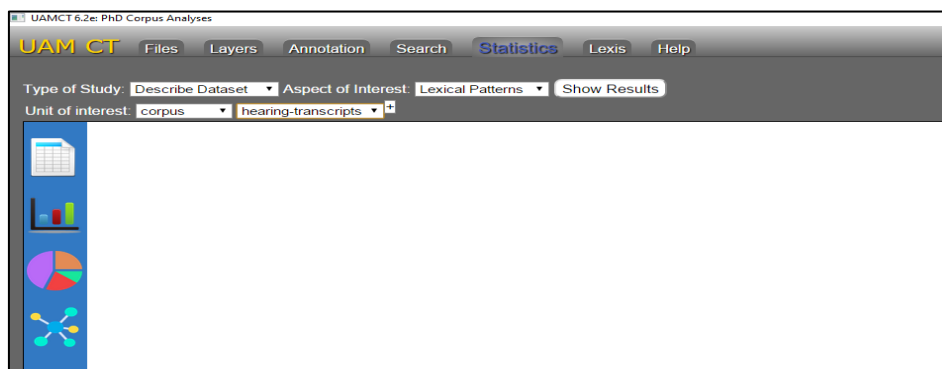


Figure 3.12: Statistics Pane Window.

3.3.1.2.2.6.1 The Chi-square test. The Chi-square test is a statistical test for significance. It is mostly used to investigate the significance in comparison (O'Donnell, 2013). The significance is graded using from 0 to 3 units of the symbol '+'; this means, as explained by O'Donnell (2013, pp. 35-36):

- The use of no symbol in the cell (+ x 0) means there is no significant difference of use of the particular feature in the cell concerned.
- The use of one symbol in the cell (+ x 1) means that the results are significant for 90% of the cases, and 10% is the percentage of error. In other words, among 10 features one is expected to be not relevant.
- The use of two symbols in the cell (+ x 2) means that the results are significant for 95% of the cases and 5% is the percentage of error. In other words, among 20 features one is expected to be irrelevant.
- The use of three symbols in the cell (+ x 3) means that the results are significant for 98% for the cases and 2% is the percentage of error. In other words, among 50 features one is expected to be not relevant.

The figure below shows a sample of the results that show divergent and significant results.

Unit of Interest: <markers-analysis feature='evidentials'/>
 Aspect: feature
 Counting: per1000

EVIDENTIALS-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000tks	N	Per1000tks	ChiSqu	P	Signif	Effect Size
- belief-expressed	2160	19.7	757	1.8	5042.11	0.0000	+++	
- inference	233	2.1	42	0.1	681.76	0.0000	+++	
- sensory	115	1.0	28	0.1	308.26	0.0000	+++	
- hearsay	896	8.2	629	1.5	1335.30	0.0000	+++	
TOTAL:	3404	31.0	1456	3.5				

BELIEF-EXPRESSED-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000tks	N	Per1000tks	ChiSqu	P	Signif	Effect Size
- thought	1532	14.0	57	0.1	5525.36	0.0000	+++	
- conviction(belief)	230	2.1	528	1.3	41.78	0.0000	+++	
- knowledge	242	2.2	108	0.3	496.18	0.0000	+++	
- shared-knowledge	102	0.9	3	0.0	371.15	0.0000	+++	2.433
- comprehension	40	0.4	56	0.1	25.32	0.0000	+++	0.546
- not-belief	1	0.0	0	0.0	3.80	0.0511	+	0.191
TOTAL:	2147	19.6	752	1.8				

Figure 3.13: An Example of Chi-square Test Signs Appearance in the Statistical Pane

3.3.1.2.2.7 *The lexis pane.* This pane is a window where the corpus is studied in respect to type of study (Frequency or Keywords), source (file or files studied), and exclusion and specification of needed segments (nouns, verbs, etc.). The following figure shows the window with the options allowed for the study:

UAMCT 6.2e: PhD Corpus Analysis

UAMCT Files Layers Annotation Search Statistics **Lexis** Help

Type of Study: Keywords Source: Whole Corpus Show

Exclude function words Exclude proper names Lemmatise Wordclass: -

Compare to: Rest of Corpus Hide Low Freq Hide Low Signif Hide Low Propens.

Word	N (Text)	% (Text)	N (Ref.corp.)	% (Ref.corp.)	Propensity	ChiSqu	Log.Lik.	sqrt(Prop*ChiSqr)
says	5	0.00031	0	0	100	99999999	99498.74	NaN
2014	7	0.00043	0	0	100	99999999	99498.74	NaN
and	381	0.02351	0	0	100	99999999	99498.74	NaN
use	23	0.00142	0	0	100	99999999	99498.74	NaN
of	357	0.02202	0	0	100	99999999	99498.74	NaN
data	72	0.00444	0	0	100	99999999	99498.74	NaN
the	563	0.03473	0	0	100	99999999	99498.74	NaN
committee	17	0.00105	0	0	100	99999999	99498.74	NaN
to	557	0.03436	0	0	100	99999999	99498.74	NaN
at	36	0.00222	0	0	100	99999999	99498.74	NaN
in	214	0.0132	0	0	100	99999999	99498.74	NaN
building	7	0.00043	0	0	100	99999999	99498.74	NaN
chairman	7	0.00043	0	0	100	99999999	99498.74	NaN
mr.	353	0.02178	0	0	100	99999999	99498.74	NaN

Figure 3.14: Lexis Pane Window of a File from the Corpus Used.

3.3.1.2.2.8 The help pane.

This pane provides explanation as to how to use the software. The figure below shows this pane:

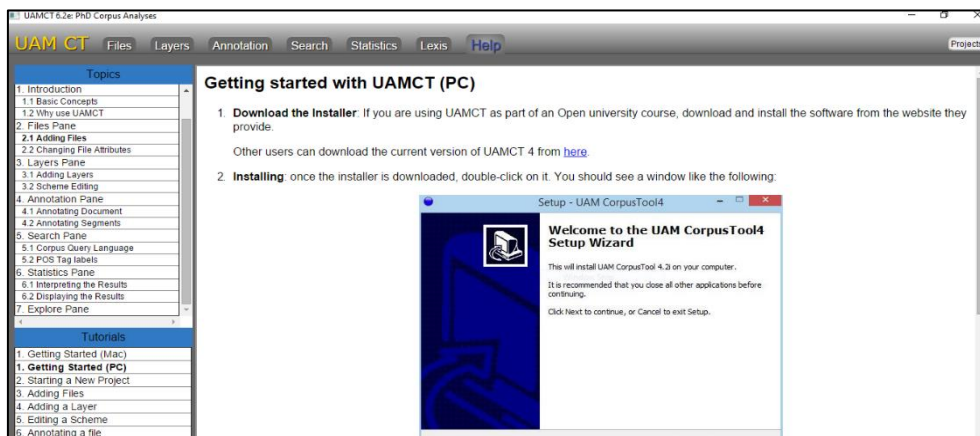


Figure 3.15: Help Pane Window

3.3.1.2.3 The UMA corpus tool role in the research. In this research, this tool is used for annotation and statistical aims. This means that this tool is mainly used for the annotation of Evidential and Affect markers. It is, as well, equipped with a Layer of Affect markers that facilitates the manual annotation and saves time of Layer building. Furthermore, it serves at deriving results in the form of tables, bar-charts, and pie-charts, which is an efficient step to facilitate the interpretation, understanding, and explanation of the findings.

The results of this analytical step are the quantitative findings that are exposed to the qualitative analysis. The qualitative method adopted in this paper is presented in the next section.

3.3.2 Qualitative Analysis

The qualitative method is used to interpret and explain the results of the research leading to the studied myth or theory. As Dörnyei (2007) states, it works on the clarification of the “observations and dynamics underlying the examined situation or phenomenon” (p. 35). Similarly, Conrad (1999) determines the qualitative method as “functional interpretations [that] describe the communicative functions [that] correspond[s] to the quantitative patterns [ibid]” (p. 4).

The qualitative method in this paper is to interpret, explain, and infer the relation between all of the linguistic choices (of EMs, AMs, speaker presentation of himself and others) and discourse settings (event, genre, social position of speakers) with the aim of investigating the existence of any manipulative strategy undertaken by speakers. This is to say that the use

of the qualitative method in this dissertation consists of: first, the interpretation of the functional use of the evidential expressions (as process) with respect to the participants. This interpretation is done based on the SFL framework adapted to the Table 2.12. Second, the interpretation of affect expressions usage and impact on the hearers. This understanding is based on AT framework adapted to Table 2.14. Third, the purpose after the choice of Evidential expressions and Affect expressions made by speakers is explained in relation to the situation of communication. It also seeks to explain the way these linguistic patterns make changes in the social position of speakers with respect to this genre. Fourth, and last, the inference of the ideological changes as a consequence of the use of Evidential expressions and Affect expressions are made based on CDA perception of ideology, intention, and social communication.

The study of the function of these expressions (affect and evidential) in context forms the qualitative analyses. This includes the semantic, syntactic, and pragmatic analyses, where the associated use of affect and evidential expressions indicates speakers' attitude. Thus, qualitative analysis helps in the specification of communicated meaning, intended meaning, and implied meaning, and the way the later contribute to the manipulative strategy.

Despite the fact that both quantitative and qualitative approaches are very effective analysis tools, each method has its own weakness(es). The quantitative method does not have the potential to identify the reasons after the examination of a corpus (Dörnyei, 2007, p. 35). Whereas based on the theoretical research, the qualitative research does. However, the qualitative research method is unable to fixe determined results. Furthermore, the personal opinions and objectives of the researcher may affect the interpretation of results, highlights Dörnyei (2007). This is why a mixed method must be more effective and objective. So, in the following sequence, mixed methods should be identified.

3.3.3 Mixed Method

The use of both quantitative and qualitative methods with the aim of achieving better results is called the mixed method. Dörnyei (2007) defines this method as the “combination” of both quantitative and qualitative methods, with the aim of eliminating their weaknesses and sorting out their functionalities.

Dorneyei (2007) sees quantitative and qualitative methods as a continuum of each other, and the use of mixed methods is fruitful in comparison to the use of only one method. Similarly,

Neuman (2014) emphasises on the use of mixed method in social research as multi-vision perspective. In the following section, the analysis procedure is presented.

3.4 Analysis Procedure

In this section, the data collection methodology and data analysis procedures are exposed and explained.

3.4.1 Data Collection

In order to collect data, the three files are first inserted into the UMA corpus tool. As seen in the figure below:

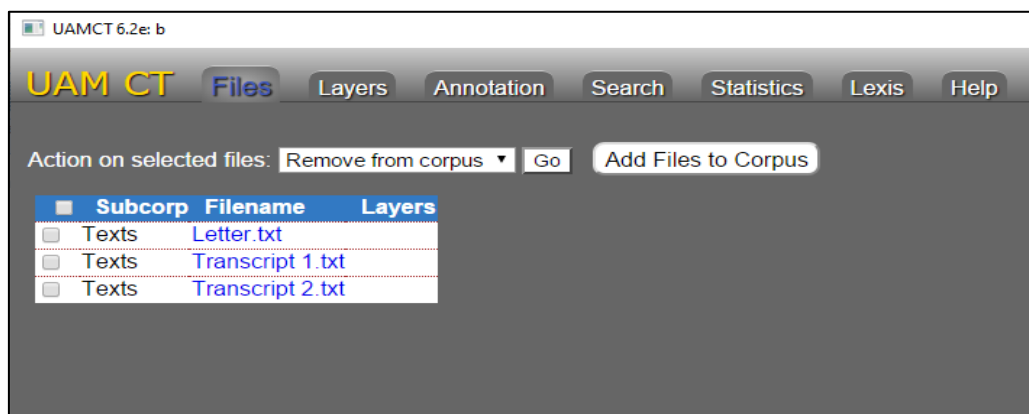


Figure 3.16: Screenshot of Corpus Insertion in the UMA Corpus Tool

Then, for the data collection, the corpus has passed through a set of annotations. The first annotation concerns corpus segments, and the second annotation phase concerns the investigated aspects affect and evidentials. As seen in the following subsection.

3.4.1.1 Annotation layers. The annotation tools are called Layers in the UMA corpus tool. The layers are created regarding the needs of the theoretical perception, as seen in the following:

3.4.1.1.1 Corpus layers. The corpus layer is a layer used to annotate segments in each file. This layer is built based on the segmentation of statements of the corpus. The Letter is sectioned into an introduction, a questioning part, an answering part, and a conclusion. Whereas, the Hearings' Transcripts are segmented into Committee opening statements, Witness opening statements, Questioning Statements, Witness responding statements and the Committee closing statements. The following figure shows the Corpus layer use:

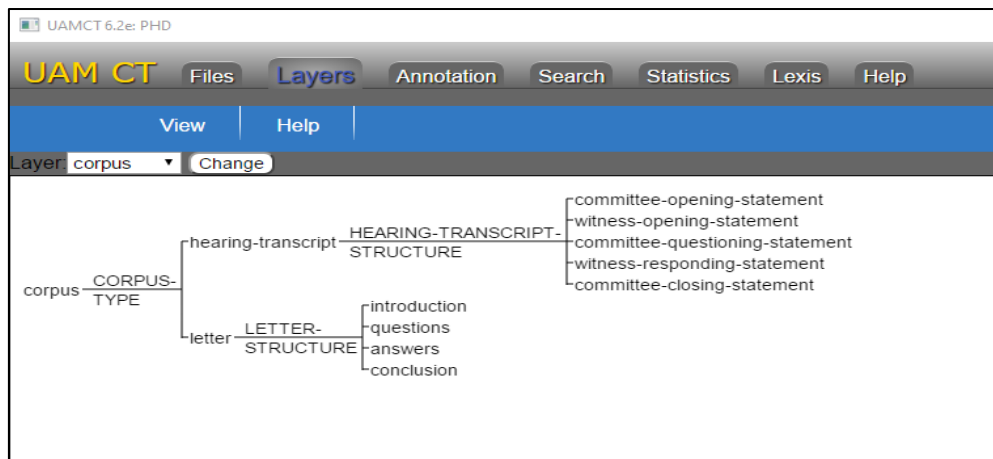


Figure 3.17: Screenshot of the Corpus Layer used in the UMA Corpus Tool

It is worth noting that, in many sections of the findings and discussions, both Hearings' Transcripts are considered as one corpus, namely the spoken corpus. Also, this layer is used to detect within which segments the investigated aspects are more frequent and what purpose they serve.

3.4.1.1.2 Analyses layers. The analysis layers used are, as previously mentioned, Affect and Evidential layers that are considered in the following subsections:

3.4.1.1.2.1 Affect analysis layer. Affect analysis layer is a layer built upon the perception of Appraisal Theory, as previously mentioned in Chapter two. As recognised earlier, only affect markers (expressions) were being taken into consideration (as shown in the figure). However, during the annotation phase, other aspects have been added and changes have been made to the basic structure of the Affect appraisal layer adopted from the UMA corpus tool named after Bednarek (shown in Figure 3.19). This is to say that the used layer for affect expressions annotation in this research have undergone many strategical changes, as shown in Figure 3.20 below.

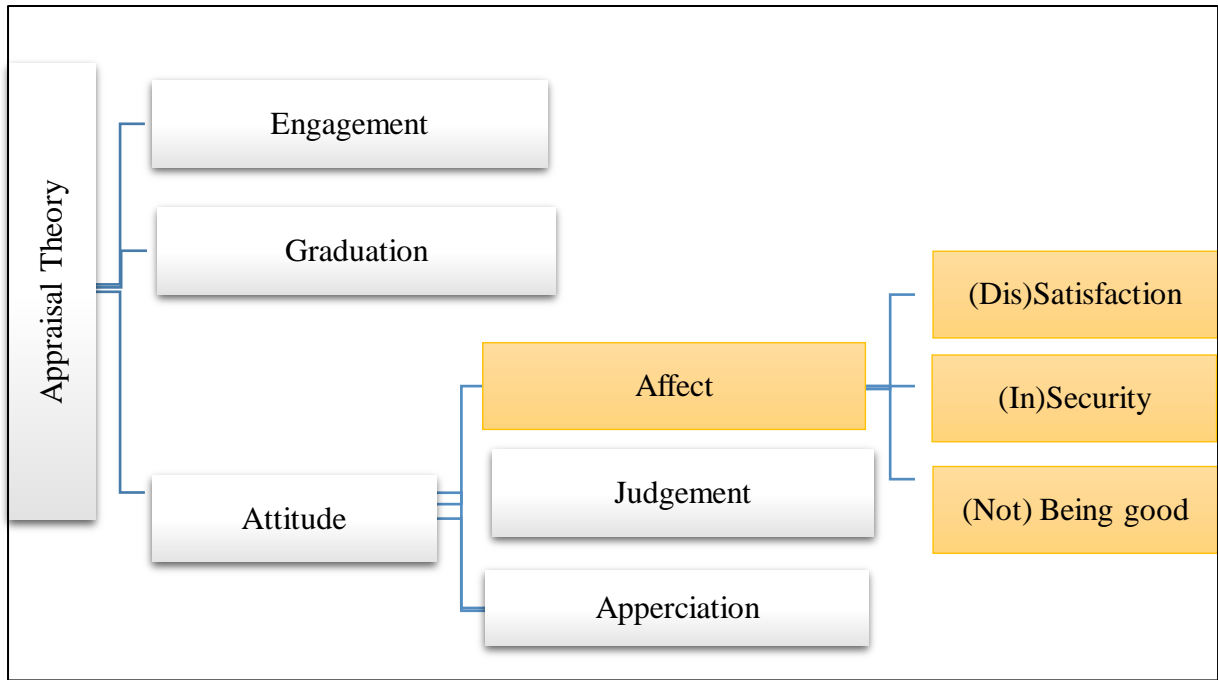


Figure 3.18: The Theoretically Applicable Appraisal Framework

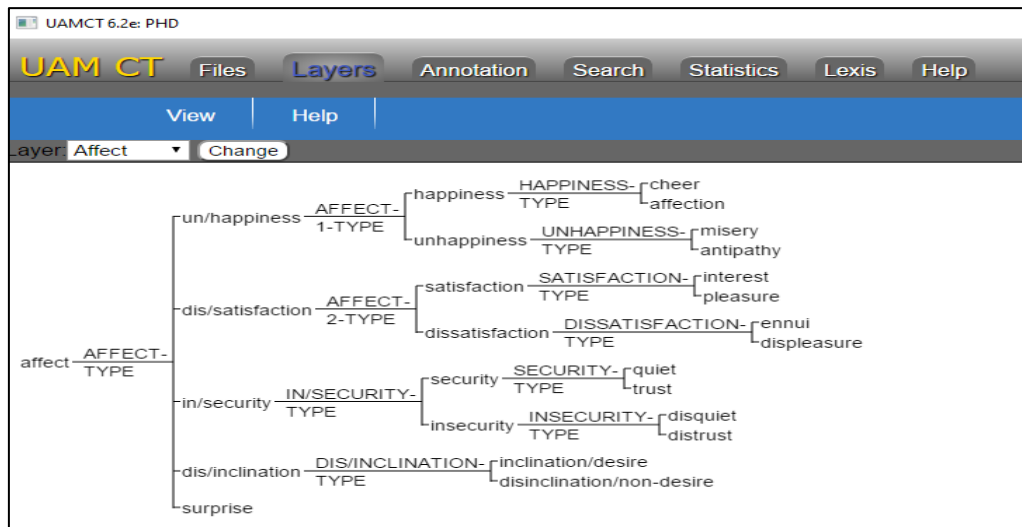


Figure 3.19: Affect Layer Scheme (named after Bednarek) Proposed by the UMA CT

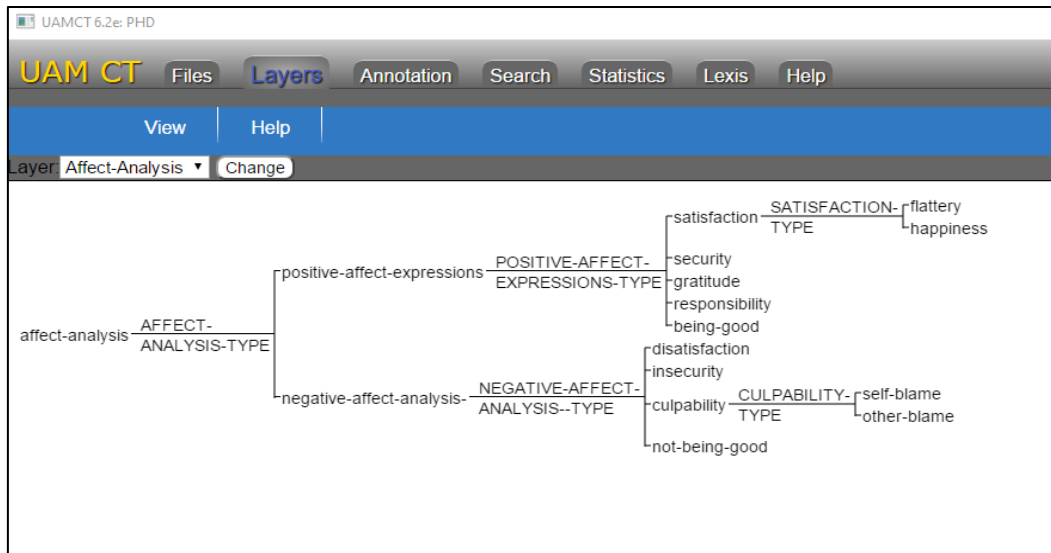


Figure 3.20: Screenshot of Affect Scheme Layer Annotated in This Research

Unlike the way Affect scheme layer is approved for the requirements of this research, the evidentials scheme layer is generated. In the following subsection, Evidential layer is considered.

3.4.1.1.2.2 Evidentials scheme layer. Evidentials scheme layer is a layer generated from the theoretical perspective of evidentiality and the requirements of the research. It consists of four main evidential types: Belief, Inference, Sensory and Hearsay. Both Belief and Inference evidential types are departed into a set of different subtypes, Belief expressions as expression of a mental process is decorticated:

First, Thought expressions: are the expression of information as gained through thinking process.

Second, Conviction expressions: are the expression of belief as faith. It is named conviction to avoid confusion with Belief as a general evidential type as mental process.

Third, knowledge expressions: are the expression of information as known, understood and perceived.

Fourth, Shared-knowledge expressions: are expressions shared by the speaker(s) as known to the interlocutor.

Fifth, Comprehensiveness expressions: are the expression of speaker's perception about a specific point.

It is worth noting that the above classification of belief evidential expressions has not been studied or highlighted in any paper, as far as the references used are concerned. Whereas,

inference evidential type is divided into two evidential types as stated in the theoretical part of this research. It is divided into Induction evidential expressions and Deduction evidential expressions. Furthermore, at each evidential expressions system, the expresser (participant), marker, and expression features are annotated, as seen in the following chart:

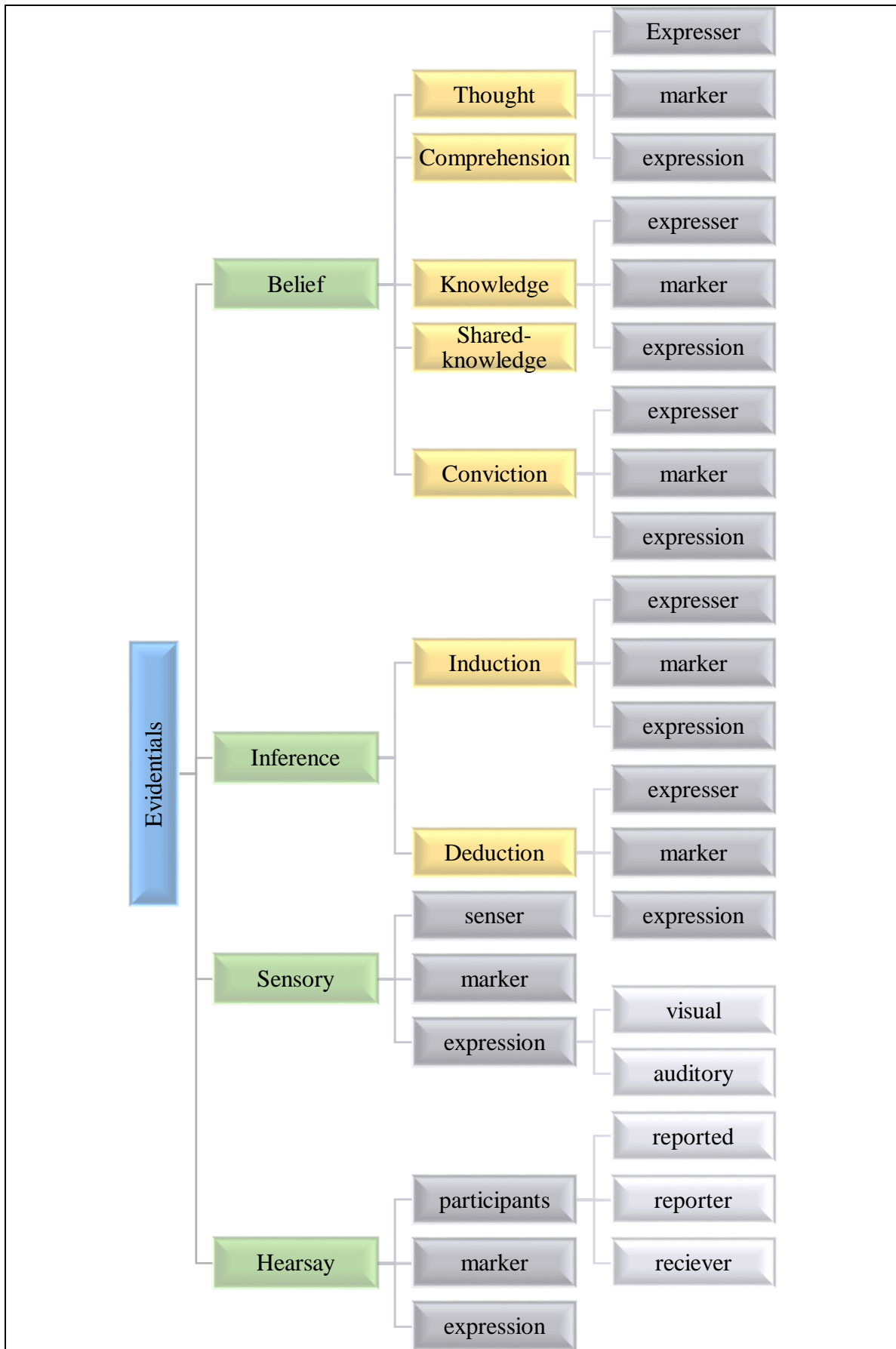


Figure 3.21: The Used Scheme of Evidential

In addition to those features, the expresser as a system was divided into witness, witness and its team, senators, and senators and committee. As shown in the following two figures.

For the length of the scheme, the following two figures expose the layer window of evidentials scheme used:

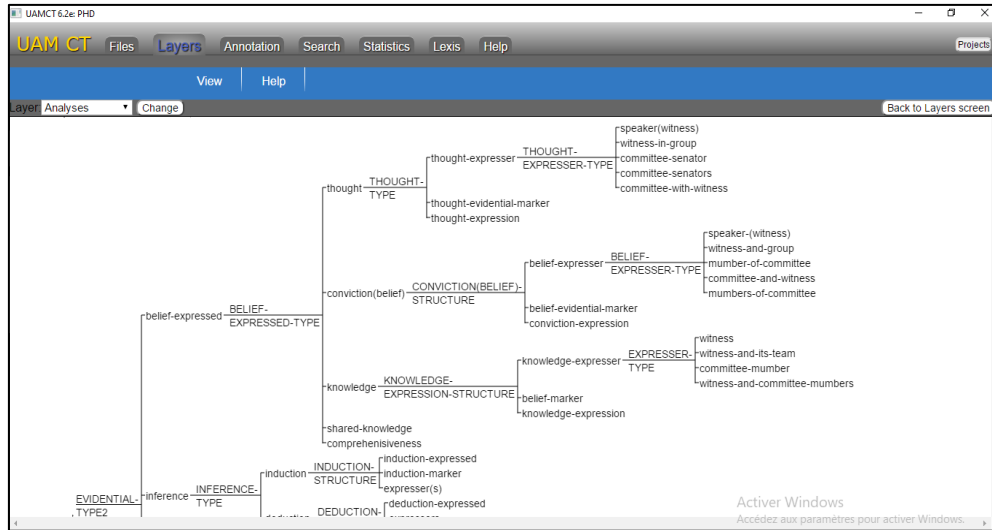


Figure 3.22: Screenshot of Belief Evidential Scheme Layer Annotated in This Research

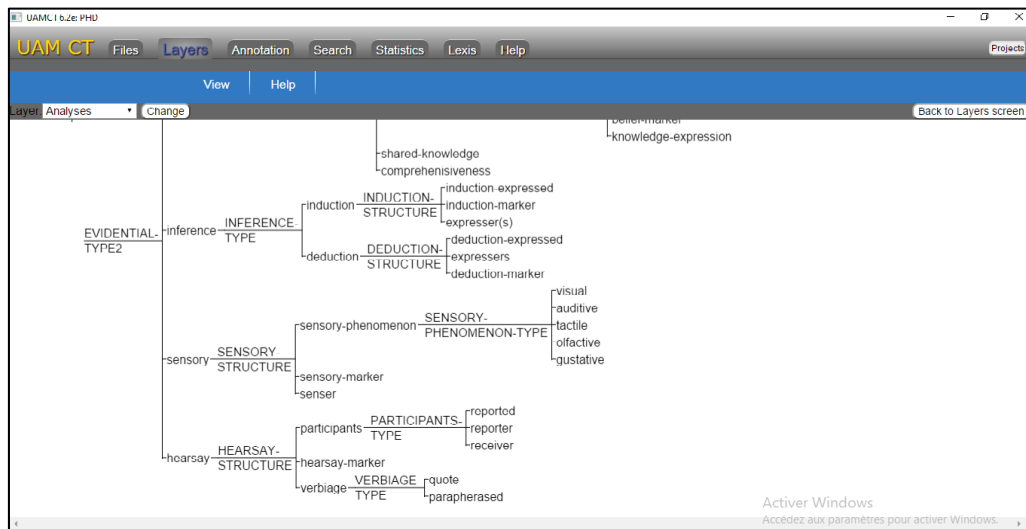


Figure 3.23: Screenshot of Evidentials Scheme Layer Annotated in this Research

3.4.2 Data analysis procedure

The data analysis procedure adopted in this research is the annotation of the previously seen features in Evidential and Affect Layers, as shown in the figure below.

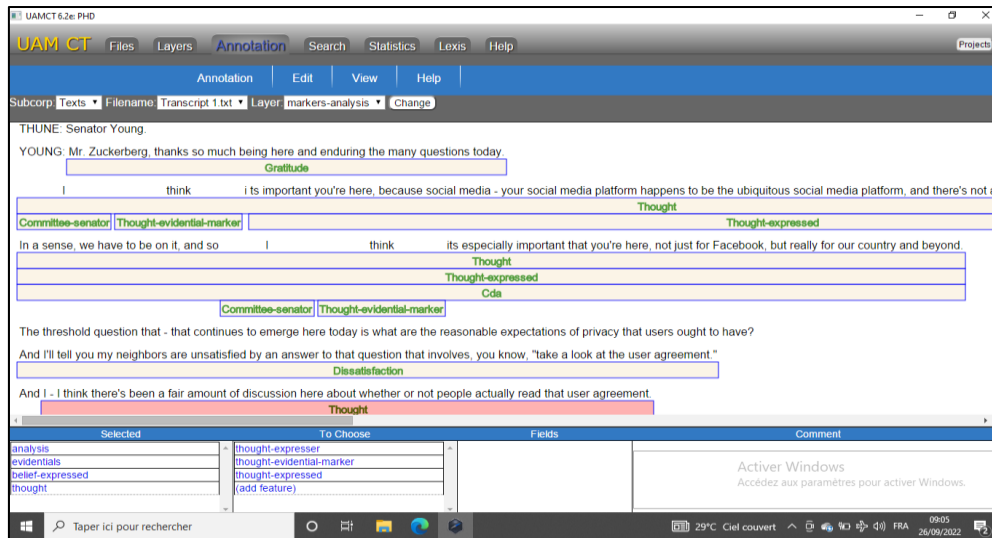


Figure 3.24: A Screenshot of an Annotation Window

The annotation procedure has given birth to a set of tables where the frequency of occurrence of each investigated features is calculated and also compared between files. These tables are stated in Chapter four. It has also shown lists of annotated expressions, as shown in the following figure.

Texts/Letter.txt	Texts/Letter.txt	Texts/Letter.txt	Texts/Letter.txt
ages? The testimony	indicated	the mechanisms used...	
f third-party apps,	we discovered	a very small number...	
service itself. We	've heard	loud and clear that...	
the investigation?	Based on recent allegations,	we have reopened ou...	
our founder and CEO	described in his written testimony,	Facebook is an idea...	
se assessments, PwC	determined	that Facebook's pri...	
arch overwhelmingly	demonstrates	that in- product co...	
2015, The Guardian	published an article reporting	that Kogan and his...	
iversity of Toronto	certified that	it deleted any user...	
Christopher Wylie)	certified that	it deleted any user...	
on behalf of SCL,	certified to Facebook, that	it deleted the info...	
recent reports that	indicate	Facebook was planni...	
Press reports also	indicated	the plan was for he...	
dated in 2016, it)	s noted:	"When you use third...	
he Data Policy also	said:	"We collect informa...	
as invalid. 17. We	often hear	that algorithms des...	
onal testimony, you	indicated	"There will alway...	
Facebook post, you	stated	that Facebook will...	
Facebook post, you	stated	that Facebook wants...	
r question. 2 You	stated	during questioning...	
bruary 11, 2018, you	posted	that Facebook had s...	
and Facebook, Ve	facebook	the above cases	

Figure 3.25: A Screenshot of the Window of the Annotated List of Hearsay Markers

Conclusion

This chapter exposed the procedure undertaken to investigate the implication of both affect and evidential expressions in the manipulative strategy in legal discourse. It outlined the research methodology used, that is corpus-assisted method. This research method is a mixed method basically focused on the UMA corpus tool identification (annotation) of frequency of use of the investigated aspects, as a quantitative method and a listing of the annotated expressions in the aim of interpretation and analysis as a qualitative method.

Also, this chapter identified the computational UMA corpus tool used, exhibited the legal corpus used in this research, and described the procedure for data collection and analysis. These two later subsections are the basic building blocks of the following chapter, which works on presenting the findings and discussing the results with the aim of coming up with conclusive results.

Chapter four: Data analysis and Discussion

Chapter Four: Data Analysis and Discussions

Introduction

This chapter is the practical part of the research. It is built on two main sections: the first section is concerned with data collection, data interpretation, and discussions. It focuses on the existence of the inspected features in the corpus. The analyses of the features are based on two main focalisations. First, the existence norm, in which the features are studied from a quantitative perspective, is then funnelled to a comparison of their occurrence in segments of both spoken and written corpora. Second, there is an analysis of the choice of the expressions used by the speaker. The annotated expressions are listed and investigated with the aim of extracting the speakers' attitude and communicative goals.

This section is structured into one main section that consists of findings, ordering, and data analysis. This section is divided into two subsections: it is formerly introduced by the exposition of general findings, in which all of the inspected features are tabulated and graphed. The first subsection consists of the investigation of Affect in the corpora and its expected influence and goal of use of each type on the hearer(s). The second subsection tackles the investigation of Evidentiality in the corpora and its implicit role, apart from showing the speaker's source of knowledge.

Besides, the second section discusses the findings. It consists of the discussion of Affect and Evidentials expressions' implication with manipulation, the manipulative procedure, and the types of manipulation used by the interlocutors. Also, the research questions and hypotheses are reconsidered; and finally, the interaction between both quantitative and qualitative methods in the analysis is briefed. Thus, as previously stated, the first step in this chapter reviews the findings as seen in the succeeding section.

4.1 Findings and Data Analysis

This section is where all the findings are exposed and the analyses of the data are conducted. This section is composed of two main subsections: the first one studies positive and negative affect expressions occurrence, comparison of occurrence in written and spoken, and the occurrence and use of each type in each of the written and spoken corpora. Then, a reconsideration of the use of affect expressions regarding the interlocutors' choice. In the same way, evidential expressions are studied in the second subsection. The data collected by the UMA corpus tool consists of a set of tables and lists. These results are interpreted and discussed. Consider the following table:

Table 4.1: Frequency of Investigated Features in the Corpora

MARKERS-TYPE	Texts/Letter.		Texts/Transcript		Texts/Transcript 2	
	N	Per1000Wds	N	Per1000Wds	N	Per1000Wds
Affect	93	0.3	374	8.1	276	5.6
Evidentials	600	3.9	556	43.1	439	29.2

The first feature analysed is the Affect Marker. This marker has been investigated according to scheme (3.2), as shown in the third chapter. And the second feature is Evidential Markers. As shown in this table, the frequency of each feature in the corpora is considerable. In the following subsections, each of the investigated features is separately studied. The first feature tackled is Affect expressions.

4.1.1 Affect Expressions Analysis and Interpretation

In this section, the affect expressions used by the speakers are tabulated and discussed in five main sub-sections. First, the affect expressions' occurrence in the studied corpora is outlined. Second, a comparison is made between the frequency of the occurrence of affect expressions in the spoken versus written corpora. Third, the occurrence of the affect expressions in each segment of the corpus used are calculated. The later is an entry to the fourth sub-section that is affect expressions' choice and use by the speakers. The fifth and last subsection is the discussion of Affect expressions' implications for manipulation.

It is worth mentioning that affect markers are calculated and measured on the basis of 1000 words in each file. This is to say that the frequency of occurrence that is measured depends on the file's volume (not on the whole corpora). In the study below, the frequency is not taken into consideration for the reason that it takes Affect expression for one element (marker) at a time when the affect studied is based on an expression (utterance).

It is also worth mentioning that during the annotation of affect in the corpora. Gratitude, responsibility, and being-good (self-praising) as positive types of affect expressions have repeatedly appeared, in addition to culpability (self-blame and others-blame) and not-being-good (self-dispraising) as negative affect types.

4.1.1.1 Affect expressions in the whole corpora. Affect expressions, as already identified, are the speakers' self-expression. In this part of the chapter, these expressions are investigated in the corpora understudy.

Table 4.2: *Affect Expressions' Occurrence in the Corpora*

AFFECT-TYPE2	Texts/Letter.txt		Texts/Transcript 1.txt		Texts/Transcript 2.txt	
	N	Per1000Wds	N	Per1000Wds	N	Per1000Wds
Positive	57	0.2	256	5.6	210	4.3
Negative	36	0.1	118	2.5	66	1.3
TOTAL:	93	0.3	374	8.1	276	5.6

It is made clear by the table that positive affect markers are widely used in the three files. Positive affect expressions are used 57 times in the Letter, whereas negative affect expressions are calculated as 36 expressions. However, in Hearing's Transcript 1 (T1), positive affect markers are largely used, a total of 256 expressions are calculated, and 118 are negative ones. Besides, in Hearing's Transcript 2 (T2), the positive expressions found are 210 expressions and 66 negative affect expressions. In the next subsections, each of the positive and negative affect types of expressions investigated are studied separately in each file.

4.1.1.1 Positive affect expressions occurrence in the corpora. The table below shows the frequency of positive affect expressions investigated in the corpora.

Table 4.3: *Positive Affect Expressions' Occurrence in the Corpus.*

POSITIVE-TYPE	Letter		Transcript 1		Transcript 2	
	N	Per1000Wds	N	Per1000Wds	N	Per1000Wds
Satisfaction	7	0.0	47	1.0	44	0.9
-Flattery	1	0.0	13	0.3	10	0.2
Security	0	0.0	1	0.0	0	0.0
Gratitude	10	0.0	140	3.0	121	2.4
Responsibility	2	0.0	16	0.3	34	0.7
Being-good	37	0.1	52	1.1	11	0.2
TOTAL:	57	0.2	256	5.6	210	4.3

Satisfaction expressions in the Letter are measured as seven expressions, whereas, in T1 and T2, they are estimated as 47 and 44 expressions, respectively. Flattery as a sub-type of satisfaction occurred once in the Letter and 13 to 10 times in T1 and T2, respectively. Gratitude expressions represent 10 expressions in the Letter, whereas there are 140 and 121 expressions in T1 and T2, respectively. Responsibility expressions are calculated as two expressions in the Letter, and 16 and 34 in T1 and T2, respectively. In addition to these types of affect expressions, the expressions of being-good are also used, and they are calculated in the Letter 37 expressions, in T1 a total of 52, and in T2 a total of 11 expressions.

In addition to positive affect expressions occurrence in the corpora, negative affect expressions are also found. In the following subsection, negative affect expressions occurrence in the corpora is studied.

4.1.1.1.2 Negative affect expressions occurrence in the corpora. The table below shows the frequency of negative affect expressions located in the corpora.

Table 4.4: Negative Affect Expressions' Occurrence in the Corpora

NEGATIVE-TYPE	Texts/Letter.txt		Texts/Transcript 1.txt		Texts/Transcript 2.txt	
	N	Per1000 Wds	N	Per1000 Wds	N	Per1000Wds
Dissatisfaction	12	0.0	44	1.0	37	0.7
Insecurity	2	0.0	26	0.6	1	0.0
Culpability	18	0.0	35	0.8	8	0.2
-blame-of-others	7	0.0	16	0.3	4	0.1
- self-blame	11	0.0	19	0.4	4	0.1
Not-being-good	4	0.0	13	0.3	20	0.4
TOTAL:	36	0.1	118	2.6	66	1.3

This table exposes the amount of negative affect expressions used in the corpora. The estimated number of dissatisfaction expressions used by the interlocutors in the letter are 12 expressions and 44 and 37 expressions in T1 and T2, respectively. Insecurity expressions are calculated as two in the Letter, and 26 and one expressions in T1 and T2. Culpability expressions are distinguished into two categories: blame of other and self-blame. Blame of others expressions are estimated to be seven expressions in the Letter, and 16 and four expressions in T1 and T2. Dispraise expressions are called 'not-being-good' expressions; this type of expressions are estimated to be four in the Letter, and 13 and 20 expressions in T1 and T2, respectively.

As a consequence of the interpretation of affect expressions used in the corpora, it was noticed that both positive and negative affect expressions in the Letter are less frequently used in the Letter than in each Transcript. Besides, each of the Transcripts shows quite a similar amount of positive affect expressions. Conversely, negative affect expressions are modestly used in T2 as compared to T1, except for the amount of dispraising (not-being-good). These results are clearly mirrored by the graphs below.

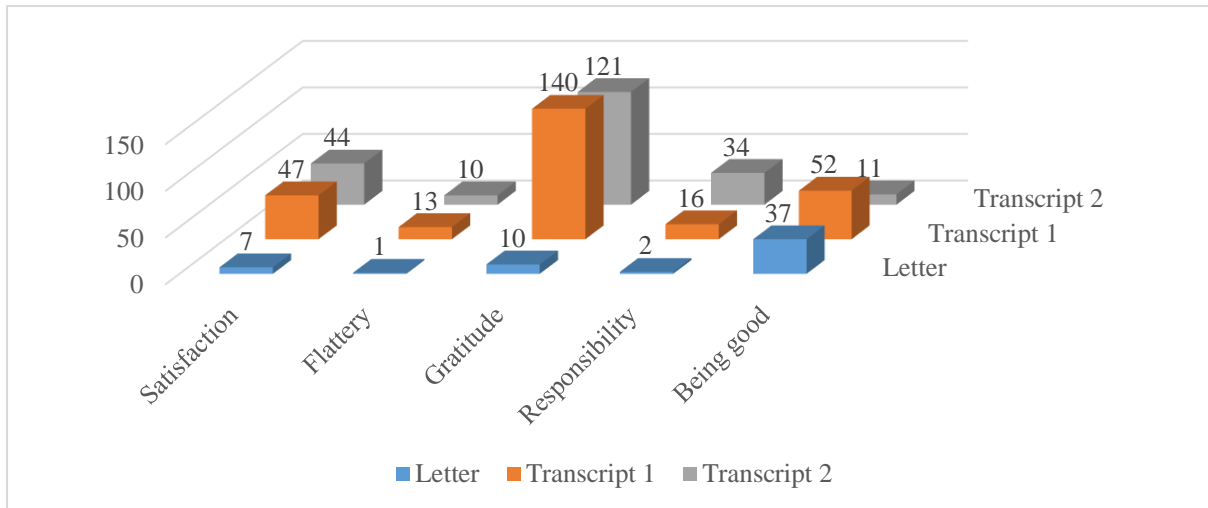


Figure 4.1: Positive Affect Expressions' Occurrence in the Corpora

Similarly to this chart, the chart below shows the occurrence of negative affect expressions in the corpora.

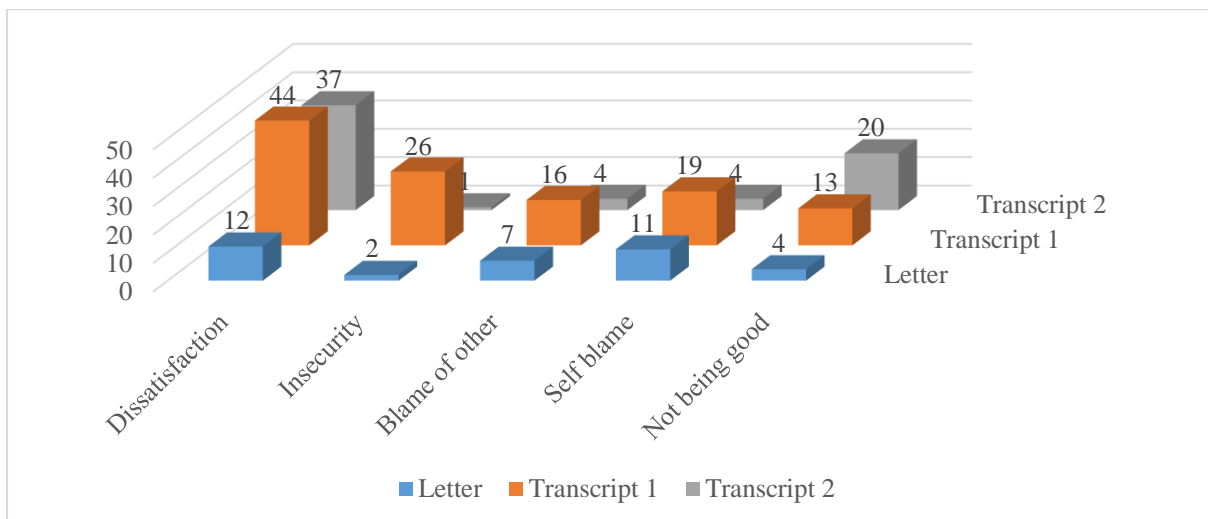


Figure 4.2: Negative Affect Expressions' Occurrence in the Corpora

Both T1 and T2 are, as previously mentioned, taken from the same corpus, namely 'Spoken corpus' or 'Hearings' Transcripts'. The later is compared to the Letter (written corpus) regarding affect expressions' use. That is why the differences in occurrence of affect expressions between T1 and T2 is necessarily studied to clarify the affective divergence between the first hearing and the second hearing, as shown in the following subsection.

4.1.1.2 Comparison of affect expressions' occurrence in T1 and T2. Generally, on the one hand, the number of positive affect expressions used in T1 and T2 is approximately similar. All of Satisfaction, Flattery, and Gratitude expressions are quite equally used, in a kind of correlative relationship. However, Responsibility and Being-good expressions are used in a kind of inverse relationship. Consider the graphs below:

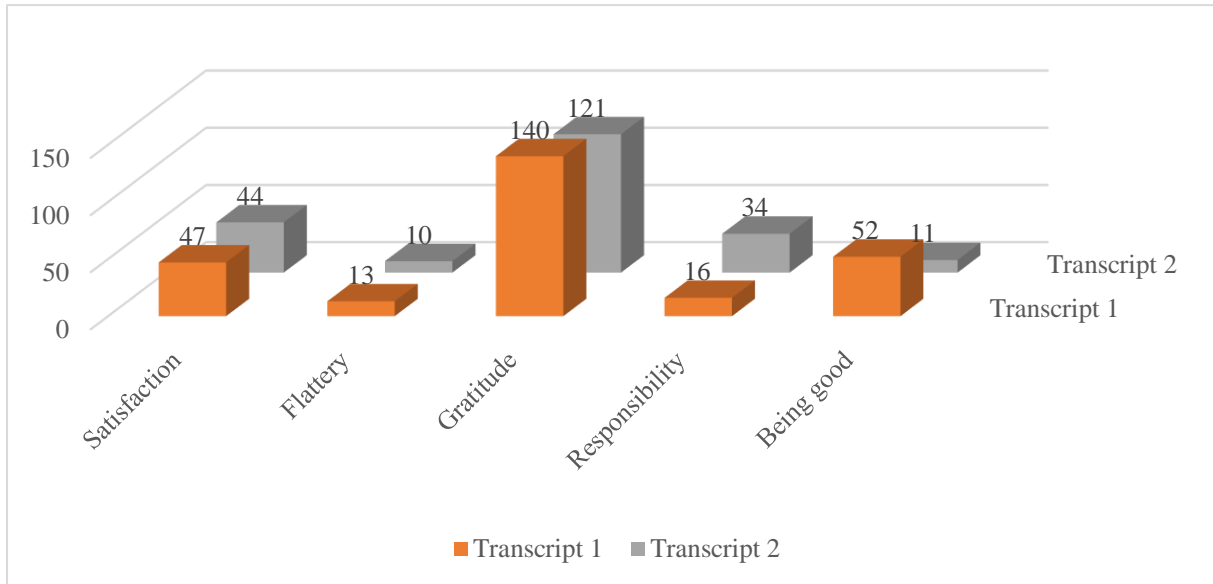


Figure 4.3: Positive Affect Expressions' Occurrence in the Spoken Corpus

Responsibility is used in T2 more than in T1, which is a sign that the users in the second Hearing expressed more responsibility expressions. This means that after the first hearing, the speakers recognised that they should express more responsibility.

On the other hand, the use of negative affect expressions is clearly less frequent in T2 except for dispraise expressions that are less used in T1. Dissatisfaction expressions are quite similarly used in T1 and T2. Insecurity, blame-of-other, and self-blame are rarely used in T2.

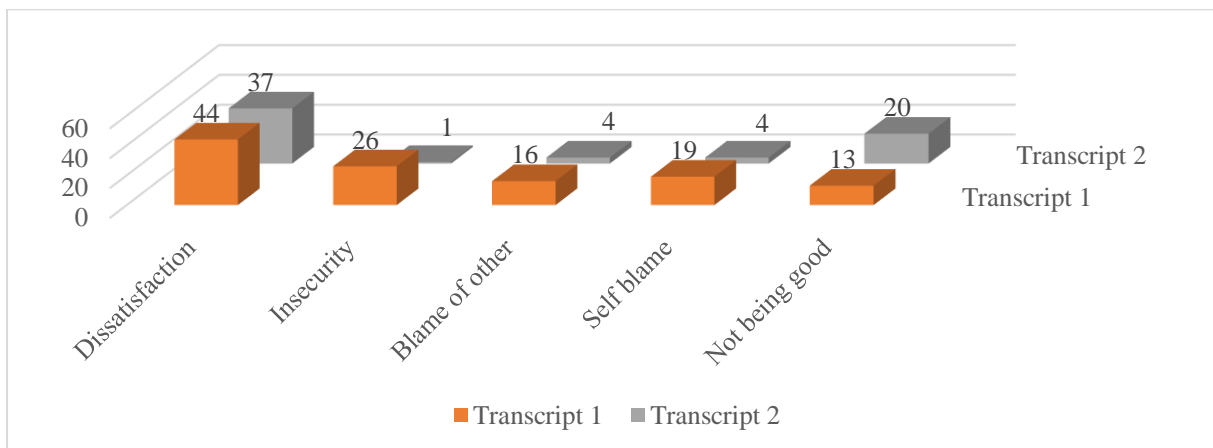


Figure 4.4: Negative Affect Expressions' Occurrence in the Spoken Corpus

Insecurity expressions are infrequently used in T2, which is a sign of the unwillingness of interlocutors to share feelings of insecurity. However, dispraise expressions are more frequently used in T2, which indicates that the interlocutors in T2 opted to point out the bad actions they have committed. It is also noted that expressions of blame are less frequently used in T2 than in T1, and that self-blame and others-blame expressions are equally utilised in T2. This means that the interlocutors equally shared the culpability feeling in the second hearing, whereas, in the first hearing, the interlocutors expressed a wider feeling of self-blame than others-blame. In the following section, the use of affect expressions is compared between the Hearings' Transcripts and the Letter.

4.1.1.3 Affect expressions' use in spoken vs written corpora. In this section, affect expressions occurrence is compared between spoken corpus (transcripts) and written corpus (Letter). The comparison is done automatically by UMA Corpus Tool. The percentage of occurrence is calculated on the basis of 1000 words and the Chisquare test shows the significance of the comparison. The following tables (screenshots) show the results that are found:

Table 4.5: UMA Statistics of Comparison of Affect Expressions in the Hearings' Transcripts and the Letter

AFFECT-TYPE2	hearing-transcript		letter		Comparison			
	N	Per1000Wds	N	Per1000Wds	ChiSqu	P	Signif	Effect Size
- positive	464	4.9	57	0.2	1514.74	0.0000	+++	
- negative	182	1.9	36	0.1	534.75	0.0000	+++	
TOTAL:	646	6.8	93	0.3				

As shown in the screenshot of UMA comparison statistics, affect expressions are more widely used in the Hearings' Transcripts than in the Letter. The Chisquare tool shows a high significance in this divergence producing a total of 646 affect expressions in the Transcripts and 93 expressions in the Letter. Actually, positive affect expressions are 464 expressions in the Transcripts and 57 expressions in the Letter. Similarly, negative affect expressions are more frequent in the Transcripts than in the letter, with a total of 182 expressions in the Transcripts and 36 expressions in the Letter. In the following screenshot, the occurrence of each type of positive affect expressions used in the corpus are compared in the Hearings' Transcripts and the Letter.

4.1.1.3.1 Positive affect expressions in spoken vs written corpus. The chart below shows UMA statistics comparing positive affect expressions in the Hearings’ Transcripts and the Letter.

Table 4.6: UMA Statistics Comparing Positive Affect Expressions in the Hearings’ Transcripts vs the Letter

POSITIVE-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000Wds	N	Per1000Wds	ChiSqu	P	Signif	Effect Size
- satisfaction	91	1.0	7	0.0	317.02	0.0000	+++	2.469
- security	1	0.0	0	0.0	3.90	0.0482	++	0.206
- gratitude	258	2.7	10	0.0	950.86	0.0000	+++	
- responsibility	50	0.5	2	0.0	183.85	0.0000	+++	1.480
- being-good	63	0.7	37	0.1	111.83	0.0000	+++	1.264
TOTAL:	463	4.9	56	0.2				

Satisfaction expressions are more frequently used in the transcripts (91 expressions) than in the Letter (seven expressions). Gratitude and responsibility expressions in the transcripts are 25 times the amount in the Letter. However, being-good expressions in the transcripts are estimated as nearly double the amount in the Letter.

Flattery expressions as a part of the satisfaction type of expressions are estimated 23 expressions in the transcripts and one expression in the Letter, as shown in the screenshot below.

Table 4.7: UMA statistics of Comparison of Flattery Expressions in the Hearings’ Transcripts vs Letter

SATISFACTION-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000Wds	N	Per1000Wds	ChiSqu	P	Signif	Effect Size
- flattery	23	0.2	1	0.0	84.13	0.0000	+++	0.927

In the following, the negative affect expressions occurrence is compared in the Hearings’ Transcripts vs the Letter.

4.1.1.3.2 Negative affect expressions in spoken vs written corpora. The chart below shows UMA statistics comparing negative affect expressions in the Hearings’ Transcripts vs the Letter.

Table 4.8: UMA Statistics of Comparison of Negative Affect Expressions in the Hearings’ Transcripts vs the Letter

NEGATIVE-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000Wds	N	Per1000Wds	ChiSqu	P	Signif	Effect Size
- dissatisfaction	79	0.8	12	0.0	247.31	0.0000	+++	1.941
- insecurity	27	0.3	2	0.0	94.44	0.0000	+++	0.979
- culpability	43	0.5	18	0.0	94.31	0.0000	+++	1.034
- not-good	33	0.3	4	0.0	107.87	0.0000	+++	1.055
TOTAL:	182	1.9	36	0.1				

The number of dissatisfaction, insecurity, and dispraise expressions are more than five times more in the transcripts than in the Letter. However, expressions of culpability in the transcripts are estimated at twice the amount in the Letter. These expressions of culpability as mentioned earlier are distinguished into self-blame and blame-of-others. The occurrence of these two types of expressions is compared in the transcripts vs the Letter, as shown in the following screenshot:

Table 4.9: UMA Statistics of Comparison of Culpability Expressions in the Hearings’ Transcripts vs Letter

CULPABILITY-TYPE	hearing-transcript		letter		Comparison			
	N	Per1000Wds	N	Per1000Wds	ChiSqu	P	Signif	Effect Size
- blame-of-others	20	0.2	7	0.0	47.92	0.0000	+++	0.679
- self-blame	22	0.2	11	0.0	43.52	0.0000	+++	0.659
TOTAL:	42	0.4	18	0.0				

In the Hearings’ Transcripts, the number of both blame-of-others and self-blame occurrences is estimated as double the amount in the Letter.

To wrap up, affect expressions used in the transcripts are at least two times the number of affect expressions in the Letter, despite the fact that the size of the Letter file is three times bigger than the size of the Hearings’ Transcripts files. In the following section, affect expressions use and choice are interpreted and discussed.

4.1.1.4 Affect expressions occurrence and use. In this section, the expressions of affect are considered. This section is divided into two main sections. The first deals with the positive affect expressions, and the second deals with the negative affect expressions. In each of these sections, the results of the subordinate types are interpreted and discussed, respectively. Correspondingly, in the following section, Positive affect expressions occurrence and use are discussed.

4.1.1.4.1 Positive affect expressions occurrence and use. As seen in the third chapter, this study focused on many types of positive affect expressions: Satisfaction, Security,

Gratitude, Responsibility, and Being-good expressions. These types of affect expressions are considered in the following subsections. The first type to be seen is Satisfaction expressions occurrence and use.

4.1.1.4.1.1 Satisfaction expressions in the corpora. Satisfaction and Flattery expressions occurrence and used in the whole corpus, are interpreted and analysed in these subsections. The following section, in the one hand, tackles satisfaction expression in the Letter.

4.1.1.4.1.1.a Satisfaction expressions in the Letter. Satisfaction and Flattery expressions are rarely used in the Letter. The table below exposes the frequency of satisfaction and flattery expressions in the Letter. As shown, some questioners expressed satisfaction and even a compliment in the questioning part.

Table 4.10: *Satisfaction and Flattery Expressions’ Frequency in the Letter*

POSITIVE- TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Satisfaction	0		6		1		0	
Flattery	0		1		0		0	

The expressions of satisfaction in the Letter is focused on the actions Facebook has taken as improvement to the platform. Consider this excerpt:

Since the hearing, I have been informed by Facebook employees that the company does block child pornography at the point of upload, which I applaud.

Besides, one of the questioners flattered Facebook by saying:

you created a world-wide platform and your social media platform with 2 billion users changed the world.

The questioner used this expression as a compliment on the CEO’s competence in computing program creation, and the platform’s success.

Different, Facebook team used one expression of satisfaction, which is:

Facebook would be happy to review any proposed legislation and provide comments.

This expression is used in the aim of expressing acceptance and welcome to provide help in reviewing legislative proposals.

On the other hand, in the Hearings, Satisfaction and Flattery expressions are widely used at all hearing stages, as shown in the subsection below.

4.1.1.4.1.1.b Satisfaction expressions in the Hearings’ Transcripts. The table below exposes the frequency of satisfaction and flattery expressions in the Hearings’ Transcripts.

Table 4.11: Satisfaction and Flattery Expressions’ Frequency in the Hearings’ Transcript

POSITIVE-TYPE	Committee Opening statement		witness-opening-statement		committee-questioning-statement		witness-responding-statement		committee-closing-statement	
	N		N		N		N		N	
Satisfaction	9		2		65		13		2	
Flattery	5		0		18		0		0	

Concerning satisfaction, these expressions in all segments are expressed on nearly common points. Some of the committee members expressed the feeling of satisfaction with the CEO’s presence, testimony, apologies, commitment and business model, as shown in these excerpts (for more examples see Appendix C):

It’s even more extraordinary to have a single CEO testify before nearly half of the United States Senate

but I’m glad that you are here

I appreciate that you have apologized for it

I congratulate you on your business model

However, the witness expressed satisfaction through pride and happiness with the platform performance and the changes that they are undertaking, as revealed by these excerpts:

The good news here is that we already made big changes to our platform in 2014

Congressman we pride ourselves on doing good technical work

In addition, the CEO also expressed a kind of satisfaction with the committee member's questions and upon the AI (Artificial Intelligence) assistance in safety on the platform, as is shown by the following excerpts:

Well, senator, this is actually a very important question, and I'm glad you brought this up

So we are doing a number of things that I am happy to talk about or follow up with afterwards around deploying new AI tools that can proactively catch fake accounts that Russia or others might create to spread misinformation

As part of satisfaction, flattery is used by the committee members to express compliments on the witness's expertise, success, and intelligence, as seen in the following excerpts:

So, Mr. Zuckerberg, your expertise in this field is without rival

You know; you are a real American success story

I appreciate the history and growth of Facebook mirrors that of many of our technological giants

Some of the things that you've been able to do are magical

You're - you - you can spot me 75 IQ points, if I can figure it out, you can figure it out

In the following subsection, Gratitude as a widely used Affect expression is considered.

4.1.1.4.1.2 Gratitude expressions in the corpora. Gratitude expressions are modestly used in the Letter, unlike the Transcripts. In this subsection, gratitude expressions are considered from the contextual meaning. As shown in the table below, some questioners expressed some expressions of gratitude whereas the Facebook team expressed only two expressions in the introductory part.

4.1.1.4.1.2.a Gratitude expressions in the Letter. The table below exposes the frequency of Gratitude expressions in segments of the Letter.

Table 4.12: Gratitude Expressions’ Frequency in the Letter

POSITIV E-TYPE	Introduction			Question			Answer			Conclusion		
	N			N			N			N		
Gratitude	2			6			0			2		

The Facebook team expressed gratitude as a sign of politeness for the questions received and the time to respond, as shown in the excerpts below:

Thank you for your questions for the record

We appreciate the time you gave us to respond to these questions

Some questioners simply expressed thankfulness for the acceptance of answering the questions, like in this excerpt:

Thank you for soliciting our questions

Gratitude is not used in the Letter as much as it is used in the hearings. In the following part, the gratitude expressions in the Hearings’ Transcripts are considered.

4.1.1.4.1.2.b Gratitude expressions in the Hearings’ Transcripts. The table below exposes the frequency of Gratitude expressions in segments of the Hearings’ Transcripts (see Appendix C).

Table 4.13: Gratitude Expressions’ Frequency in the Hearings’ Transcripts

POSITIVE- TYPE	Committee opening statements			Witness- opening- statement			Committee- questioning- statement			Witness- responding- statement			Committee- closing- statement		
	N			N			N			N			N		
Gratitude	6			0			234			15			3		

Gratitude in the Hearings' Transcripts are recurrently used by committee members. These expressions of thankfulness are addressed by committee members to the chairmen, from the chairmen to the committee member(s) and from the chairmen/committee members to the witness, or from the witness to the chairmen/committee member(s). These expressions shared by the chairmen in the opening statements are used as frequently as other gratitude expressions in the committee questioning statements, i.e.: gratitude expressions are used to thank the witness for his presence, answers, assistance, and testimony, as indicated in these excerpts:

Thank you for your testimony and thank you for your presence here today

Thank you, Mr. Zuckerberg, for being here

Thank you for that clarification

I appreciate your good auspices in voluntarily coming before us

Thank you for your patience over both days of testimony

Some expressions of gratitude are addressed to committee members and witness, like in:

Chairman thank you and - and thanks to all of our members for their patience; been a long hearing, particularly long hearing for you Mr. Zuckerberg

Other expressions of thankfulness are addressed to chairmen and committee members, like these excerpts:

Thank you, my colleagues and Senator Nelson

Thank you, Senator Durbin

Thank you, Senator Kennedy

Thank you, Mr. Chairman

However, the witness expressed thankfulness to the chairman when he gave him the word and to congressmen’s questions. This is to say that these expressions are used as a sign of politeness, as shown by these excerpts:

Thank you, Mr. Chairman

Congresswoman, thanks for the question

After the consideration of Gratitude expressions use in the corpora, the following, third, positive affect expressions analysed are Responsibility expressions.

4.1.1.4.1.3 Responsibility expressions in the corpora. Unlike Satisfaction and Gratitude expressions, expressions of responsibility are more frequently used by the witness than the committee members. In the following, this type of positive affect expressions is considered first in the Letter and then in the Hearings’ Transcripts.

4.1.1.4.1.3.a Responsibility expressions in the Letter. The Table below exposes the frequency of Responsibility expressions in the Letter.

Table 4.14: Responsibility expressions’ Frequency in the Letter

POSITIVE-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Responsibility	0		0		2		0	

As shown in the table above, responsibility expressions have been used by Facebook Team only. They used these two expressions to express awareness of the role and responsibility that is partially undertaken by the company (platform), as indicated in these two excerpts:

Protecting people's data is one of our most important responsibilities, and we are committed to continuing our work to improve how we protect people's information and to working with regulators to draft appropriate regulations

we have a responsibility to not just build tools, but to make sure that they're used in ways that are positive for our users

Unlike the Letter, Responsibility expressions in the Hearings’ Transcripts are used by both interlocutors as seen in the subsection below.

4.1.1.4.1.3.b Responsibility expressions in the Hearings’ Transcripts. The Table below exposes the frequency of Responsibility expressions (see Appendix C) in the Hearings’ Transcripts.

Table 4.15: Responsibility Expressions’ Frequency in the Hearings’ Transcripts

POSITIVE-TYPE	Committee opening statements		Witness-opening-statement		Committee-questioning-statement		Witness-responding-statement		Committee-closing-statement	
	N		N		N		N		N	
Responsibility	0		1		12		36		1	

The committee members expressed the responsibility of the government and Congress to understand the situation and to protect people’s rights in privacy and safety, as indicated in these excerpts:

but if people don't have faith in the institutions of government, and then it's - it's our responsibility to enhance that faith so they have less cynicism in us, you know, we don't have a very strong democracy just because we've got a good constitution

We view our duty as protecting people's information, but if there is valid service, especially in the U.S., we will, of course, work with law enforcement

We, as Congress, have a responsibility to figure out what went wrong here and what could be done differently to better protect consumers' private digital data in the future

In the responding statements, the witness expressed the company’s responsibility vision that has shifted from the connection of people to the protection of users from harmful content, fake accounts and news, and the free self-expression of users with respect to the norms of safety, as indicated in the following excerpts:

Overall, I would say that we're going through a broader philosophical shift in how we approach our responsibility as a company

It - at Facebook, specifically, I view our responsibility as not just building services that people like, but building services that are good for people and good for society as well

I think our responsibility is to make sure that the content on Facebook is not harmful

I think that that -- our general responsibility is to allow the broadest spectrum of free expression as we can

Apart from responsibility, interlocutors expressed themselves as being good. The following subsection tackles this type of positive affect expressions.

4.1.1.4.1.4 Being-good expressions in the corpora. Being-good expressions are more widely used by the witness than the committee members. In the following, this type of positive affect expressions is considered first in the Letter and then in the Hearings’ Transcripts.

4.1.1.4.1.4.a Being-good expressions in the Letter. The table below exposes the frequency of being-good expressions in the Letter.

Table 4.16: Being-good Expressions’ Frequency in the Letter

POSITIVE-TYPE	Introduction			Question			Answer			Conclusion		
	N			N			N			N		
Being-good	0			0			37			0		

In Facebook Team responding statements, the team shared ideas about the positive side of the platform. And, they stated that they were working on users’ privacy control and AI adoption as a safety tool, as shown in these excerpts:

So, we’re taking additional steps to put people more in control of their privacy

As Facebook has grown, people everywhere have gotten a powerful new tool to stay connected to the people they love, make their voices heard, and build communities and businesses

We already use artificial intelligence to help us identify threats of real world harm from terrorists and others

We also use AI to help find child exploitation images, hate speech, discriminatory ads, and other prohibited content

The team also referred to the efforts the staff is making, as shown by these excerpts:

We are always working to help people understand and control how their data shapes their experience on Facebook

We work tirelessly to identify and report child exploitation images (CEI) to appropriate authorities

We are working hard to regain the trust of our community

Their frustration was understandable, and we apologized to them

In addition, the team shared their comprehension and apologies for the situation, as is reflected by this excerpt:

Their frustration was understandable, and we apologized to them

In the following, positive affect expressions of being-good are investigated in the Hearings' Transcripts.

4.1.1.4.1.4.b Being-good expressions use in the Hearings' Transcripts. The table below exposes the frequency being-good expressions occurrence and use in the Hearings' Transcripts.

Table 4.17: Being-good Expressions' Frequency in the Hearings' Transcripts

POSITIVE-TYPE	Committee opening statements		Witness-opening-statement		Committee questioning statement		Witness-responding-statement		Committee -closing-statement	
	N		N		N		N		N	
Being-good	0		0		10		53		0	

As shown in this table, the witness used more expressions than the committee did. These expressions are used to express the positive achievements of his company and team (see Appendix C), like in:

Our service is about helping people connect and information.

Furthermore, he insisted that the focus of the platform is on protection against Terrorists, as shown in these excerpts:

with an area like finding terrorist propaganda, which we've actually been very successful at deploying A.I. tools on already

Today, as we sit here, 99 percent of the ISIS and Al Qaida content that we take down on Facebook, our A.I. systems flag before any human sees it

The witness also shared the need to interact, when committee members pointed to the situation in Myanmar. Since this situation is considered as an unpleasant situation and the witness expressed the need to interact preceded by the pronoun “we” as an implication, this has a positive impact on the hearers, as is stated in the following excerpt:

what's happening in Myanmar is a terrible tragedy, and we need to do more

As an expression of positive appearance, the witness expressed himself as being supportive of some regulations, and that he had the thought that some regulations are good, as is mentioned in the following excerpt:

I'm not the type of person that thinks that all regulation is bad

Most of the positive expressions that are shared by the committee members towards the company express a nuance of flattery, whereas the being-good expressions in the hearings are the expressions of trust in Facebook, sharing Facebook's principles and optimism about the Facebook team commitment. Consider:

... I - and I trust that you all are going to work on that

the principles that you're articulating are the ones that we believe in

I appreciate you being here and I'm just hoping that you're committed to working with us in the future in addressing these concerns

In the same way as positive affect expressions' analyses, negative affect expressions are also studied, interpreted and discussed in the following section.

4.1.1.4.2 Negative affect expressions' occurrence and use. As seen in the third chapter, this research focuses on many types of Affect expressions (i.e., negative and positive affect expressions). In this section, the negative affect expressions: Dissatisfaction, Insecurity,

Culpability, and Not-being-good expressions are considered in the following subsections, respectively. Thus, the first type tackled is Dissatisfaction expressions.

4.1.1.4.2.1 Dissatisfaction expressions in the corpora. Dissatisfaction expressions occurrence and use in this section are studied, respectively, in the Letter and Hearings’ Transcripts.

4.1.1.4.2.1.a Dissatisfaction expressions in the Letter. Dissatisfaction expressions in the Letter are equally used by both questioners and the Facebook Team. The table below exposes the frequency of Dissatisfaction expressions used in the Letter.

Table 4.18: Dissatisfaction expressions’ occurrence in the Letter

NEGATIVE-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Dissatisfaction	0		6		6		0	

Questioners expressed dissatisfaction towards Facebook failure in data protection, broken promises, and untruthfulness with the users. These notions are mentioned in the excerpts below:

- FB failed to protect its users' private data
- You've already broken your past privacy promise
- Facebook was aware of the issue for two years
- It was brought to light by someone other than Facebook
- Because I personally believe Facebook was, and continues to be, exploited by bad actors

Facebook Team responses are also accompanied by some dissatisfaction expressions that reflect Facebook team discontent for the situation, as shown in the following excerpts:

- We are saddened to hear these reports and are investigating this issue
- We're deeply saddened when the tools we've developed to help people come together and share experiences with their friends and family are misused

Unlike the Letter, the Hearings’ Transcripts contain a considerable amount of Dissatisfaction expressions. The following subsection considers this point.

4.1.1.4.2.1.b Dissatisfaction expressions in the Hearings’ Transcripts. The table below exposes the frequency of Dissatisfaction expressions’ occurrence in the Hearings’ Transcripts.

Table 4.19: Dissatisfaction Expressions’ Occurrence in the Hearings’ Transcripts

NEGATIVE-TYPE	Committee Opening statements		Witness-opening-statement		Committee-questioning-statement		Witness-responding-statement		Committee-closing-statement	
	N		N		N		N		N	
Dissatisfaction	4		5		49		21		0	

Dissatisfaction expressions are used to reflect the committee members’ displeasure with the hearing itself, the platform and some incidences like being informed late about the breach of data, ads, discrimination, and interference in the Presidential elections. These points are shown in the following excerpts, fore more exmples see Appendix C:

Sounds much more boring

I'm a little disappointed in this hearing today

I think what worries all of us -- and you have heard it today -- is it has taken almost 3 years to hear about that

Unfortunately, in a recent lawsuit, as of February 2018, alleges that discriminatory ads were still being created on Facebook, still disproportionately impacting low-income communities and communities of color

Something's very disturbing to me, is the fact that there have been law enforcement organizations that use Facebook's platform to - to - to surveil African American organizations like Black Lives Matter

Many of us are very angry about Russian influence in the 2016 Presidential elections and Russian influence over our Presidential elections

The incident involving Cambridge Analytica and the compromised personal information of approximately 87 million American users -- or mostly American users -- is deeply disturbing to this committee

The witness expressed some expressions of dissatisfaction. These expressions are mostly about regret and comprehensiveness of disappointment of the users. In these expressions, the witness used the personal pronoun ‘I’ in the aim of not implicating anybody else with these feelings, as shown in these excerpts:

and I'm sorry

, I'm not happy with where we are,

I think people have a right to be very upset -- I am upset that that happened

and I think it is unfortunate that, when those happen, people think that we are focused on them

In the same way as the previous affect expressions are studied, the following subsection studies insecurity expressions.

4.1.1.4.2.2 Insecurity expressions in the corpora. In this subsection, the expressions of insecurity are considered in both written and spoken corpora, respectively. So, the next subsection deals with these expressions occurrence and use in the Letter.

4.1.1.4.2.2.a Insecurity expressions in the Letter. Insecurity expressions in the Letter are rare and equally used by both questioners and Facebook Team. The table below shows the frequency of occurrence of insecurity expressions in the Letter.

Table 4.20: Insecurity Expressions' Occurrence in the Letter

NEGATIVE-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Insecurity	0		1		1		0	

One of the questioners sent the excerpt below to reflect insecurity of Facebook:

Facebook is invasive and people early on had no idea what they were getting into

Similarly, the Facebook Team shared on the insecurity of technology as a whole, as shared in the excerpt below:

Of course, we cannot rely on technology alone to keep our community safe

Unlike, the following subsection studies the insecurity expressions that are widely used in the Hearings' Transcripts.

4.1.1.4.2.2.b *Insecurity expressions in the Hearings’ Transcripts.* The table below exposes the frequency of occurrence of insecurity expressions in the Hearings’ Transcripts.

Table 4.21: *Insecurity Expressions’ Occurrence in the Hearings’ Transcripts*

NEGATIVE-TYPE	Committee opening statements		Witness opening statement		Committee-questioning-statement		Witness-responding-statement		Committee-closing-statement	
	N		N		N		N		N	
Insecurity	10		1		12		4		0	

The expressions of insecurity used by the committee members in both opening and questioning statements are transmitting the ideas of insecurity throughout the expression of worries. Apart from the expressions of worries, insecurity is expressed through words of negative implication. These expressions mostly address insecurity of the platform and abuse of foreign actors. Consider:

While Facebook has certainly grown, I worry it may not have matured

The - the part that people are worried about is that the data is going to be improperly used

The recent revelation that malicious actors were able to utilize Facebook's default privacy settings to manipulate users' information

foreign actors are abusing social media platforms like Facebook to interfere in elections and take millions of Americans' personal information without their knowledge in order to manipulate public opinion

you have an obligation, and it's up to you, to ensure that that dream does not become a privacy nightmare

Unlike, the witness expressed insecurity related to the activity of people and ignorance about the control settings and also to the threat from foreign companies, as shown in the following excerpt:

I brought up the Chinese Internet companies, I think that that's a real - a real strategic and competitive threat that, in American technology policy we (inaudible) should be thinking about

After dealing with insecurity expression as an affect type in this subsection, the following subsection deals with the expression of culpability.

4.1.1.4.2.3 Culpability expressions in the corpora. Culpability expressions are studied in both Letter and Hearings’ Transcripts in this subsection, respectively. The following subsection Culpability is considered as others-blame and self-blame.

4.1.1.4.2.3.a Culpability expressions in the Letter. The table below exposes the frequency of occurrence of culpability expressions in the Letter.

Table 4.22: Culpability Expressions’ Occurrence in the Letter

NEGATIVE-AFFECT-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Culpability	0		2		15		1	
Blame-of-others	0		2		4		1	
Self-blame	0		0		11		0	

Concerning blame of others, questioners expressed blame on the Facebook Team for having no reaction to the abuse of data caused by some foreign interference, as shown in the following excerpt:

You knew and did nothing!

However, Facebook Team expressed blame of people for sharing fake news and hate speech, and mis-control their data regarding the tools, allegedly, available, as shown in the following excerpt:

That goes for fake news, foreign interference in elections, and hate speech, as well as developers and data privacy

Concerning self-blame, interestingly the questioners did not express any self-blame. However, the Facebook Team has repeatedly expressed self-blame for the content shared, interference in the elections and privacy breach, as shown in the following excerpt:

We didn't take a broad enough view of our responsibility, and that was a big mistake

Culpability expressions are more frequent in the Hearings than used in the Letter. This point is seen in the following subsection.

4.1.1.4.2.3.b *Culpability expressions in the Hearings’ Transcripts.* The table below represents the frequency of occurrence of culpability expressions in the Hearings’ Transcripts.

Table 4.23: Culpability Expressions’ Occurrence in the of Hearings’ Transcripts.

NEGATIVE-AFFECT-TYPE	Committee opening statements		Witness opening statements		Committee-questioning-statements		Witness Responding statements		Committee -closing statement	
	N		N		N		N		N	
Culpability	0		0		11		31		1	
Blame-of-others	0		0		11		8		0	
Self-blame	0		0		0		23		1	

Concerning blame of others, committee members have put the blame on the CEO, Facebook as a platform, Dr. Aleksandr Kogan and Cambridge Analytica, as shown in these excerpts:

more than a decade of promises to do better, how is today's apology different?

Facebook has been done considerable reputational damage by it's association with Aleksandr Kogan and with Cambridge Analytica

They allowed a foreign company to steal private information from tens of millions of Americans, largely without any knowledge of their own

Conversely, the witness did not put so much blame on specific parties as much as he claimed the abuse and violation of privacy by some parties (like Aleksandr Kogan and Cambridge Analytica). Though, the uncertainty about the use of data by those parties was repeatedly shared by the conditional “if”, like in the following excerpt:

we're going to conduct a full audit of those apps to understand how they're using their data and if they're doing anything improper

Concerning self-blame, the committee members had no feeling of culpability. However, the witness repeatedly expressed regrets, as shown in these excerpts:

"In retrospect, it was clearly a mistake to believe them ...

we should have followed up and done a full audit then

So we have made a lot of mistakes in running the company

I - one of my greatest regrets in running the company is that we were slow in identifying the Russian information operations in 2016

I wish we had made those changes a couple of years earlier because this poll app got people to use it back in 2013 and 2014, and if we had made the changes a couple of years earlier, then we would have

And I think that we should have notified people because it would have been the right thing to do

Congressman, in retrospect, it was a mistake, and we should have and I wish we had notified and told people about it then"

In the following subsection, the so-called not-being-good expressions that refer to the expressions of dispraising are studied.

4.1.1.4.2.4 Not being good expressions in the corpora. Not-being-good expressions are used in both written and spoken corpora. The following subsection, deals with this dispraising expressions used in the Letter.

4.1.1.4.2.4.1 Not being good expressions in the Letter. The table below exposes the frequency of not-being-good expressions in the Letter.

Table 4.24: Not-being-good Expressions' Occurrence in the Letter

NEGATIVE-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Not-being-good	0		4		0		0	

The questioners used dispraising expressions to talk about Facebook, as shown by these excerpts:

It is no secret that Facebook is used to influence voters

You've already broken your past privacy promise

Rather than be a force for the democratic good, Facebook is in the terrible position of supporting the rise of fascism and hatred in the US

Facebook made promises in 2010-11 to protect users

In the following subsection, the not being good expressions in the Hearings' Transcripts are investigated.

4.1.1.4.2.4.2 Not being good expressions in the Hearings' Transcripts. The table below exposes the frequency of not-being-good expressions in the Hearings' Transcripts.

Table 4.25: Not-being-good Expressions' Occurrence in the Letter

NEGATIVE-TYPE	Committee opening statement		Witness opening statement		committee-questioning statement		witness-responding statement		committee-closing statement	
	N		N		N		N		N	
- not-being-good	0		0		30		2		1	

The dispraising expressions are considerably used by the committee members. These expressions are expressed to criticise Facebook activities and situations between the past and the present (at the time of the hearings). Facebook according to committee members is seen as over dominant, irresponsible, and harmful, as exposed by the following excerpts:

We all want that to start it - that you are becoming so dominant that we're not able to have that next Facebook

Facebook has changed an awful lot over a relatively short period of time

Facebook allowed a foreign company to steal private information

They allowed a foreign company to steal private information from tens of millions of Americans, largely without any knowledge of their own

With all due respect, Facebook is actually enabling an illegal activity, and in so doing, you are hurting people

yet their data keeps being exposed on your platform, and these breaches cause more and more harm each time

Differently, the witness used indication of being-not-good for only foreign actors and groups like terrorists, as shown in the following excerpt:

On April 9, there were five pages, located on April 9, of Hezbollah content and so forth

The ongoing section that gathers the study of affect expressions occurrence and use in the corpora lead to a set of points that are reconsidered in the following section. The reconsideration of the use of Affect expressions consists of the study of the implication of the used affect expressions in the service of manipulation.

4.1.1.5 Reconsideration of Affect expressions use. In this section, the affect is discussed relatively to manipulation. These aspects of use are discussed regarding the interpretation of the expressions in the context and the frequency of use. The findings are summarised and gathered in the table below where the green colour's degree of darkness reflects the high frequency of use of those expressions (i.e.: as much as dark is the green colour, as high is the frequency). This is to say that this section treats the contribution of affect expressions to the interlocution, in other words, the impact on interlocutors.

This section is composed of two subsections, the first deals with the contribution of the used positive affect expressions in manipulation and the second deals with the contribution of the used negative affect expressions in manipulation. Thus, the following subsection deals with the contribution of positive affect expressions, used in these corpora, to manipulation.

4.1.1.5.1 Positive affect expressions' contribution in manipulation. The table below shows positive affect expressions' frequency of use by each of the Questioner (Q), Facebook Team (FT), Committee Members (CM), and Witness (W). The grades of green colour reflect the frequency of use: from three to 10 expressions a light green, from 11 to 35 expressions, medium green and from 36 and forward a darker green are used. However, the use of zero to two expressions is disregarded.

Table 4.26: Positive affect expressions in use by interlocutors

POSITIVE-TYPE	Letter		Transcripts	
	Q	FT	CM	W
Satisfaction	6	1	76	15
Flattery	1	0	23	0
Gratitude	6	4	243	15
Responsibility	0	2	13	37
Being-good	0	37	10	53

Dependently, the next table exposes the interpretation of each type of the positive affect markers used and the frequency of use.

Table 4.27: Positive Affect Expressions' Interpretation and Ffrequency of Use

POSITIVE TYPE	Letter		Transcripts	
	Q	FT	CM	W
Satisfaction	For Facebook improvement in the platform		For the CEO's presence, testimony, apologies, commitment and business model	-As pride and happiness for the platform's performance and the changes -For committee member's interest and questions
Flattery			The witness's expertise, success and intelligence	
Gratitude	To thank the FT for the acceptance to answer the questions	-As sign of politeness for the questions received and time to respond -For chairmen and committee members' questions	To thank the witness for his presence, answers, assistance and testimony	As a sign of politeness

Responsibility			Responsibility of the government and congress to understand the situation and to protect people's rights in privacy and safety	The company's responsibility visualisation that has shifted from the connection of people to the protection of users
Being-good		Praising the efforts Facebook's personnel is doing and stating the advantages of the platform. The expression of comprehensiveness	Flattering the stuff as trustful concerning Facebook's principles and optimism about Facebook team's commitment	-The positives of his company and team -The platform's benefits in the protection against Terrorists, -the witness as being supportive for regulations

This table reflects the use of the positive types of Affect expressions by each group of the interlocutors. It highlights that the interviewers (Questioners and Committee Members) and the interviewees (Facebook Team and Witness) shared nearly the same points throughout the use of the affectual expressions. To in-depth the visualisation of these expressions' reflection of the users and the related perceptions to manipulation, the next table is provided.

Table 4.28: Positive Affect expressions' Reflection of the Q and CM and the Related Perception to Manipulation

POSITIVE-TYPE	users		Affect expressions implication	Reflection of the user	Manipulative related perception
	Q	C M			
Satisfaction			Satisfaction expressions use reflected the speakers' gratefulness for Facebook's contribution in the Tech and people's daily life.	Being good Grateful Comprehensive	Being good Cooperative
Flattery			Flattery expressions use to insinuate the cooperativeness with the CEO or to gain confidence of the CEO in their cooperativeness.	Cooperative Supportive Fan of the speaker Trust-worthy	'Productive type of manipulation' such as compliments and flattery (Akopova, 2013, p. 81)

Gratitude		Gratitude expressions' use implies a sign of politeness or a recognition of Facebook team and the CEO's cooperativeness.	Polite Respectful Grateful	The reflection of speaker(s)'s good image
Responsibility		Responsibility expressions use implies recognition of the responsibility for people's safety.	Implication with people's safety.	Cooperative Implication with a shared responsibility
Being-good		Praising expressions use to flatter the CEO and to express trust in the company's principle and personnel's competence.	Shared-belief in Facebook principles	Cooperative Positivity towards Facebook

This This table shows that the questioners have modestly expressed themselves as good, grateful, comprehensive, respectful and polite. In other words, a slight shade of good self-representation must be felt by the interlocutor. However, a considerable amount of positive self-representation is shared by the committee members. They express themselves as being good, grateful, comprehensive, respectful and polite. In addition to the expression of being fan of the speaker, Supportive, Trust-worthy and share the feeling of implication with people's safety, and belief in Facebook principles. This is to say that the witness must receive the feeling of confidence in the committee members, and feels being supported by this committee. These transmitted feelings are approached as manipulative, according to Saussure (2005) a step towards a manipulative act is the feeling of confidence; whereas, Akopova (2013) insists on the implication of flattery with manipulation.

It is worth noting that the positive affect expressions that are not used in the Letter by the questioners are used in the spoken discourse and approached as being implicated with manipulation. This is what Saussure (2005) has faith in, written texts are less manipulative than spoken ones.

The next table recapitalises the use of positive affect expressions by the interviewees, the speakers' image reflected and the related perceptions to manipulation.

Table 4.29: Positive Affect Expressions’ Reflection of the FT and W and the Related Perceptions to Manipulation

POSITIVE TYPE	Users		Affect expressions implication	Reflection of the user	Manipulative related perception
	F T	W			
Satisfaction			Satisfaction expressions use (by the witness) reflect pride and confidence.	Confidence Pride	Manipulative discourse's pragmatic features are typically about 'positive self-representation' (van Dijk, 2006, p. 373)
Flattery					
Gratitude			Gratitude expressions use denotes politeness.	Politeness	'Positive self-representation' (van Dijk, 2006, p. 373)
Responsibility			Responsibility expressions use indicate the speakers' awareness about their responsibilities partially undertaken, in other words, they admit their negligence. In addition, the company's reconsideration of their responsibilities that has shifted from connecting people to protecting them. This is to reflect a sign of awareness about the current responsibilities, and the good intentions of Facebook.	Awareness about responsibility Confession of negligence Good intentions	Declaring a part of responsibility as a sign of cooperativeness which is also 'positive self-representation'
Being-good			Being-good expressions use to praise on Facebook and the AI tech use in the future. This is to say that listing their good deeds and the company's noble intentions and goals are the objectives after the use of these expressions.	Noble intentions and objectives	'Positive self-representation' (van Dijk, 2006, p. 373)

This table shows that the Facebook Team have communicated politeness, awareness of responsibility, Confession of negligence and noble intentions. These expressions reflect the Facebook team's positive self-representation, and improvement towards the best. However, the Witness has shared the same feelings of politeness, awareness of responsibility, confession of

negligence and noble intentions, in addition to confidence and pride as signs of strength. Accordingly, the transmitted feelings of positive self-representation, strength, and better future situation are approached as manipulative, according to van Dijk (2003, 2006). In the following subsection, the contribution of the used negative affect expressions in manipulation is studied.

4.1.1.5.2 Negative affect expressions' contribution to manipulation. The table below shows the negative affect expressions use by interlocutors in the corpora.

Table 4.30: Negative Affect Expressions used by Interlocutors

NEGATIVE-TYPE	Letter		Hearings' Transcript	
	Q	FT	CM	W
Dissatisfaction	6	6	53	26
Insecurity	1	1	22	5
Culpability	3	15	12	31
Blame-of-others	3	4	11	8
Self-blame	0	11	1	23
Not-being-good	4	0	31	2

This table shows the interlocutors and their use of negative affect expressions' frequency. Dependently, the next table exposes the interpretation of each type of the negative affect markers used and the frequency of use.

Table 4.31: Negative Affect Expressions' Interpretation and Frequency of Use

NEGATIVE-TYPE	Letter		Hearings' Transcript	
	Q	FT	CM	W
Dissatisfaction	Facebook failure in data protection, broken promises and untruthfulness with the users	Facebook team discontent for the situation	Reflect the committee members' displeasures with the hearing itself, the platform and some incidences	The expression regrets and comprehension of the users' disappointment
Insecurity			Reflection of worries and insecurity of the platform and abuse of foreign actors.	Insecurity is related to the users' activities and ignorance about the control settings. In addition to the

				threat from foreign companies
Blame-of-others	Blame on Facebook team for having no-reaction to the abuse of data caused by some foreign interference,	Blame of people for sharing fake news and hate speech, and mis-control their data regarding the tools allegedly available	Blame on the CEO, Facebook as a platform, Aleksandr Kogan and Cambridge Analytica,	Blame on the others because of the abuse and violation of privacy by some parties (like Aleksandr Kogan and Cambridge Analytica)
Self-blame		Self-blame for the content shared, interference in the elections and privacy breach		Regrets for the mistakes and slow reactions
Not-being-good	Referring to Facebook		Criticizing Facebook activities as being over dominant, irresponsible and harmful	Referring to foreign actors and groups like terrorists

The next table recapitalises the use of negative affect expressions by the interviewers, the speakers' image reflected and the related manipulative perceptions.

Table 4.32: Negative Affect Expressions' Reflection of Q and CM and the Related Perceptions to Manipulation

NEGATIVE-TYPE	User		Affect expressions implication	Reflection of users	Manipulative Related perceptions
	Q	CM			
Dissatisfaction			Dissatisfaction expressions use to denote Facebook's failure in data protection and untruthfulness with the users, discrimination, and insecurity	Critical Straight Belief in importance of privacy and truthfulness with clients Anti-discrimination	Positive self-representation by the emphasis on negatives of others and positive about the self (van Dijk, 2006, p. 373)
Insecurity			Insecurity expressions use reflect the speakers' worries and insecurity of the platform and abuse of foreign actors	Worried	

Blame-of-others			Blame of other expressions use to put blame on Facebook, Dr. Kogan, and Cambridge Analytica.	Comprehension of implication of other parties as bad
Self-blame				
Not-being-good			Dispraising expressions use to talk about Facebook insecurity and abuse of privacy	Facebook's bad deeds

This table shows that the questioners have shared a modest number of criticisms of Facebook's bad deeds (untruthfulness, discrimination, and abuse of privacy). Thus, the questioners are reflected as straight, believers in truthfulness, importance of privacy, and anti-discrimination, in addition to comprehension of others' implication with abuse of data. Unlike, the committee members have expressed a great number of the same notions of critics towards Facebook's bad deeds (untruthfulness, discrimination, and abuse of privacy), in addition to the expression of fear. The members have transmitted the image of being straight, believer in truthfulness and privacy, and anti-discrimination.

The use of these negative affect expressions by the interviewers reflects others (Facebook) as being untruthful, racist and disrespectful to users' privacy. At the same time, the interviewers are being positively reflected by these expressions. This use of negative affect expressions by the questioners and committee members reflects positive self-representation and negative other-representation, which is one of the manipulative pragmatic features. As seen by van Dijk (2006), linguistic manipulation is concerned by the emphasis on positive self-representation and negative other-representation.

The next table recapitalises the use of negative affect expressions by the interviewees, the users' image reflected and the related perceptions of manipulation.

Table 4.33: *Positive Affect Expressions' Reflection of FT and W and Related Perceptions to Manipulation*

NEGATIVE-TYPE	Users		Affect expressions implication	Reflection of user	Manipulative related perception
	F	T			
Dissatisfaction			Dissatisfaction expressions are used to reflect discomfort about the situation,	Discomfort Dissatisfied Comprehensive	Positive self-representation by the emphasis on negatives of others

			and comprehension of users disappointment.		and positive about the self.
Insecurity			Insecurity expressions are related to people activities, ignorance about control settings and foreign actors interference	Insecurity reasons are people ignorance and foreign actors Un-implication	(van Dijk, 2006, p. 373)
Blame-of-others			Blame of others is put on Dr. Kogan and Cambridge Analytica and other parties.	Un-implication Culpability shared	
Self-blame			Self-blame expressions are used by for the content spread on the platform and mis-reconsideration of responsibility	Feeling of responsibility for the content share Regrets	
Not-being-good			Dispraising expressions used concerning foreign actors and groups like terrorists	Others-bad actions	

As shown by this table, Facebook team has shared a modest amount of negative expressions that reflects discomfort, dissatisfaction, Comprehensiveness of people's disappointment, regrets, and feeling of guilt. They have also shared some expressions to reflect their awareness of shared responsibility and culpability. However, a wider amount of negative affect expressions was used by the witness. He transmitted the feelings of discomfort, dissatisfaction, comprehensiveness, and regrets. In addition to the feeling of responsibility for the content shared on the platform. Though, he expressed shared culpability and put emphasise on distancing himself and his company from having deceptive intentions and highlighted that insecurity reasons are people ignorance about control settings and foreign actors' interference. This is to say that Facebook team and the witness have used negative affect expressions to share about people and foreign actors' bad actions. In addition, they have shared about the feeling of discomfort for the situation, regrets, and feeling of culpability for the harmful shared content. Furthermore, these feelings transmit positive and negative images. The negative perception concerns the company that was deceived and used by bad actors, and the confirmation of the implication with data low protection. However, the positive image shows the morality of the stuff (personnel), and the act of confession that is an act of truthfulness from the witness.

These types of negative affect expression have generally referred to a third party as being bad and self as being used and deceived.

These results are discussed regarding the manipulative mechanisms, strategy, and types in the ‘Discussion of Findings’ part that is shifted to the next chapter for methodological reasons. Yet, the succeeding section deals with Evidential expressions, which are the second investigated aspects in these corpora.

4.1.2 Evidentiality expressions’ analysis and interpretation

The analysis of evidentiality in these corpora is classified regarding evidentials types. Evidential types are constructed based on modes of knowing, as already clarified in the theoretical chapter. This is to say that the study of evidentials consists of analysing the occurrence of each evidential type in the corpora as a whole, in the corpus as written and spoken genres, and in segments of the written and spoken corpora. Simply put, evidential types as annotated (belief, inference, sensory, hearsay) are investigated in the whole corpora in the first section of this part; then, carried out as a comparative study of evidentials occurrence in both Letters and Hearings’ Transcripts in the second section. In the third section, the evidential expressions are scrutinised as the speaker’s choice in each segment of the written corpus (introduction, questions, answers, and conclusion) and the spoken corpus (committee opening statements, witness opening statements, committee questioning statements, witness responding statements and closing statements). To end up, in the fourth section, on a conclusive perception of evidentials role in the studied corpora regarding the speaker(s)’s objectives. Thus, in the following section an overview of evidential expressions occurrence in the corpora is considered.

4.1.2.1 Evidential expressions occurrence in the corpora. Evidential expressions are generously used by the interlocutors (see Appendix B), as shown in the following table adopted from the UMA corpus tool.

Table 4.34: Evidential Expressions’ Occurrence in the Corpora

EVIDENTIALS- TYPE	Letter		Transcript 1		Transcript 2	
	N	Per1000wds	N	Per1000wds	N	Per1000wds
Belief	432	1.252	359	7.919	273	5.899
Inference	17	0.050	50	1.147	47	0.976
Sensory	21	0.055	13	0.286	19	0.386
Hearsay	130	0.346	132	2.911	83	1.668
TOTAL:	600	1.665	556	12.263	439	8.950

This table shows the quantity of evidential expressions (N) and the frequency of evidential expressions in one-thousand words regarding the corpus volume (Per1000wds). Since numbers

may not give a better image as charts/figures do, the following bar chart mirrors the results in a more clarified manner. It is important to recall that the percentage of data used in the construction of the graph is calculated per 1000 words.

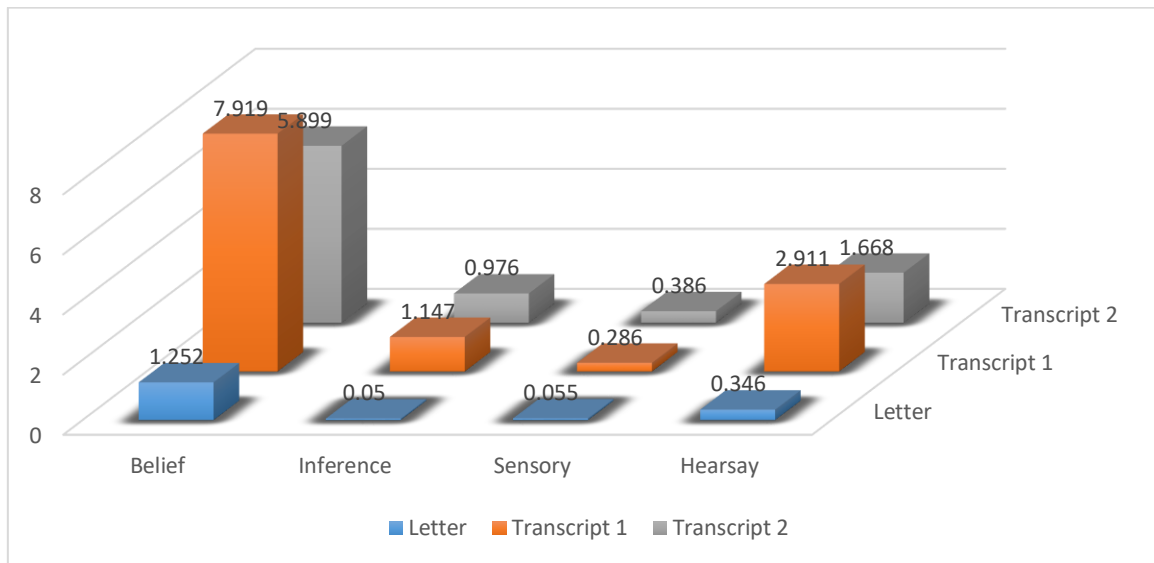


Figure 4.5: *Evidential Expressions' Occurrence in the Corpora*

It is made clear by the figure above that belief expressions are greatly used in the corpora, and that hearsay expressions are also frequently used. Unlike, inference expressions are modestly communicated; and sensory expressions are rarely utilised in the set of corpora.

Although it seems quite obvious that evidential expressions are more frequent in the spoken corpus than in the written one, a comparison of the occurrence of these expressions in these two genres is inevitable to avoid a lack in the analyses. In the following section, the comparison of the occurrence of each type of evidential expressions in between the written and spoken corpora is conducted.

It is worth noting that the comparison charts are drawn based on the ratio of frequency of the evidential markers per 1000 words regarding the volume of each file (corpus), as already mentioned in chapter three.

4.1.2.2 Comparison of occurrence of Evidential expressions in the written vs spoken corpora. In this section all of the types of evidential expressions occurrence are compared in between the Letter, Transcript 1, and Transcript 2. The first evidential type, Belief is the first element to be studied in the following subsection.

4.1.2.2.1 Belief expressions' occurrence comparison between Letter and Hearings' Transcripts. The frequency of Belief expressions use in the three files is shown in the table below:

Table 4.35: Belief expressions' occurrence comparison between Letter and Hearings' Transcripts

EVIDENTIALS-TYPE	Texts/Letter.txt		Texts/Transcript 1.txt		Texts/Transcript 2.txt	
	N	Per1000wds	N	Per1000wds	N	Per1000wds
Belief	432	1.252	352	7.919	282	5.879

As seen in the table above, belief evidentials are broadly used in the Hearing's Transcript 1 (T1) by a ratio of 7.919 markers per 1000 words and Hearing's Transcript 2 (T2) by a ratio of 5.879 markers per 1000 words, in comparison to the Letter that includes a low ratio of 1.252 belief markers per 1000 words.

The figure below echoes the results into a graph for a better visualisation of the difference.

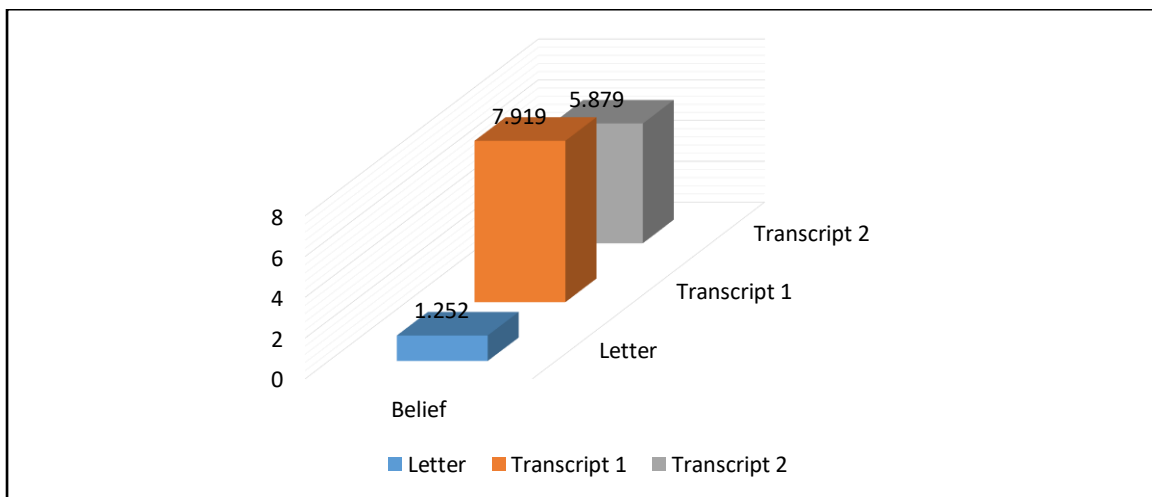


Figure 4.6: Belief Expressions' Occurrence Comparison in between the Three Files

In the same way, the differences in occurrence of Belief evidentials in the three files are investigated, the differences in occurrence of Inference evidentials are also considered in the following subsection.

4.1.2.2.2 Inference expressions’ occurrence comparison between Letter and Hearings’ Transcripts. This table has been used to show the difference in inference used between the three files.

Table 4.36: Inference Expressions’ Occurrence Comparison in between the Three Files

EVIDENTIALS- TYPE	Texts/Letter.txt		Texts/Transcript 1.txt		Texts/Transcript 2.txt	
	N	Per1000wds	N	Per1000wds	N	Per1000wds
- Inference	17	0.050	52	1.147	48	0.976

As seen in the table above, inference evidentials are largely utilised in T1 by a ratio of 1.147 markers per 1000 words and T2 by a ratio of 0.976 markers per 1000 words, in comparison to the Letter which has a minimal ratio of 0.050 markers per 1000 words. The figure below shows the results in a graph for a better picture of the difference.

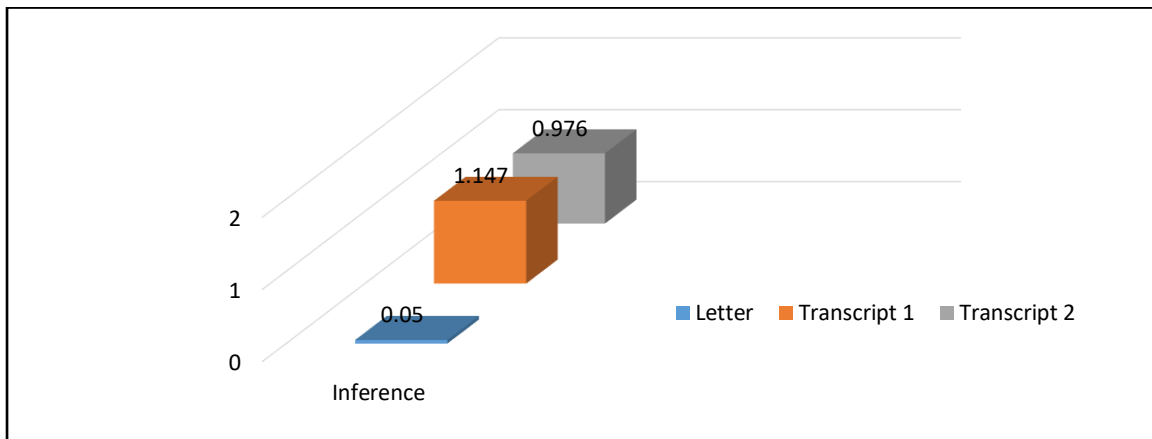


Figure 4.7: Inference Expressions’ Occurrence Comparison between the Three Files

This is to say that in the hearings the interlocutors widely use inference expressions. However, the interlocutors did in the Letter.

In the same way, the differences in occurrence of belief and inference evidentials are studied, the differences in occurrence of Sensory evidentials is investigated in the following subsection.

4.1.2.2.3 Sensory expressions’ occurrence comparison between Letter and Hearings’ Transcripts. The table below is used to show the difference in Sensory evidentials used in between the three files.

Table 4.37: Sensory Expressions' Occurrence Comparison between Letter and Hearings' Transcripts

EVIDENTIALS-TYPE	Letter.txt		Transcript 1.txt		Transcript 2.txt	
	N	Per1000wds	N	Per1000wds	N	Per1000wds
Sensory	02	0.005	13	0.286	19	0.386

As seen in the table above, sensory evidentials are largely utilised in T2 by a ratio of 0.386 markers per 1000 words and T1 by a ratio of 0.286 markers per 1000 words, in comparison to the Letter that represents the least ratio of 0.005 markers per 1000 words. The chart below has mirrored the results into a graph for a better visualisation of the difference.

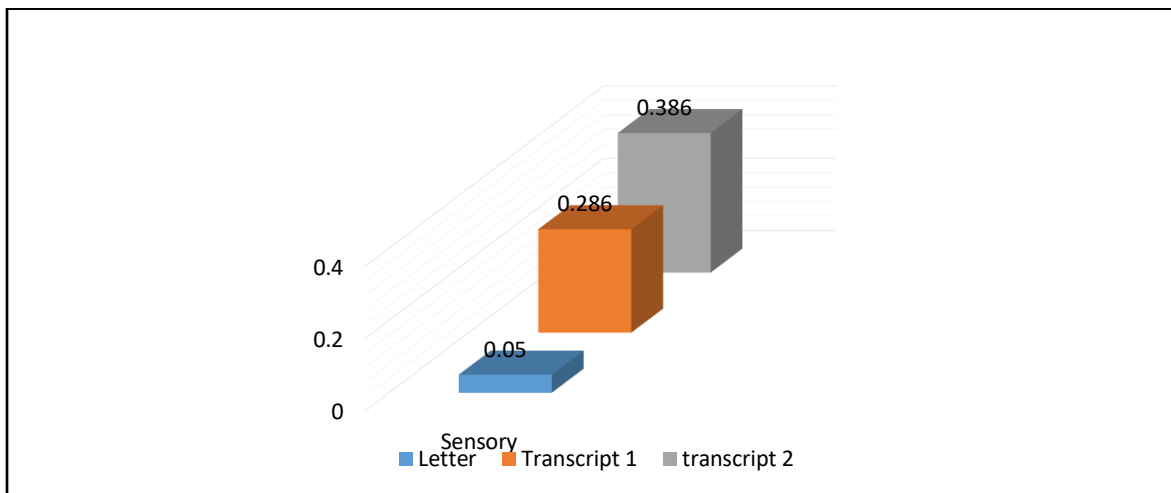


Figure 4.8: Sensory Expressions' Occurrence Comparison between the Three Files

As shown in the table and the figure above, sensory expressions are almost absent in the Letter, and modestly used in the hearings. In the same way, the previous types of evidentials are investigated, the differences in occurrence of Hearsay expressions in the three files are also investigated in the following subsection.

4.1.2.2.4 Hearsay expressions' occurrence comparison between Letter and Hearings' Transcripts. The table below shows the difference in Hearsay evidentials use between the three files.

Table 4.38: Hearsay Expressions' Occurrence Comparison between Letter and Hearings' Transcripts

EVIDENTIALS-TYPE	Texts/Letter.txt		Texts/Transcript 1.txt		Texts/Transcript 2.txt	
	N	Per1000wds	N	Per1000wds	N	Per1000wds
Hearsay	130	0.346	132	2.911	83	1.668

As seen in the table above, hearsay evidentials are largely communicated in T1 by a ratio of 2.911 markers per 1000 words and T2 by a ratio of 1.668 markers per 1000 words, in comparison to the Letter in which 0.346 markers exist per 1000 words. This is to say that Hearsay evidentials are more frequent in the Hearings' Transcripts than in the Letter. The figure below exposes the results in a graph for a better visualisation of the difference.

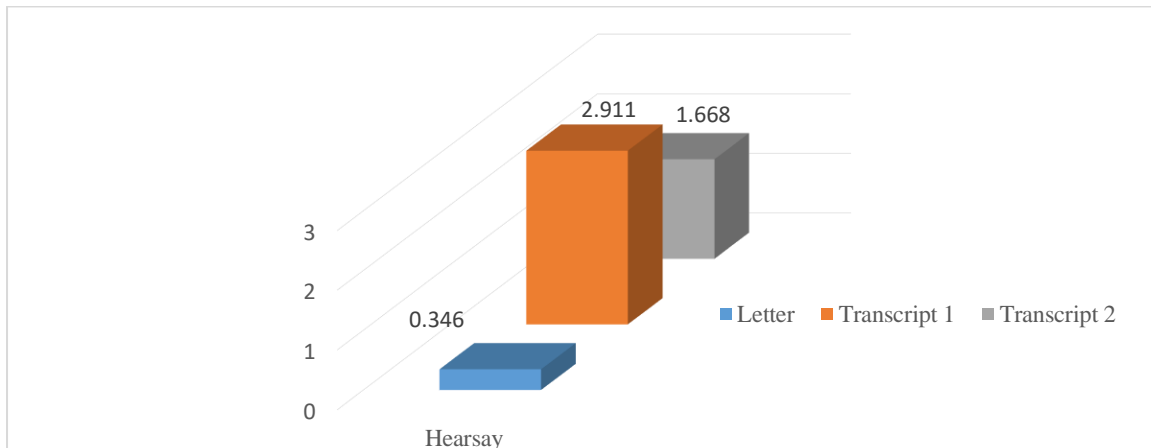


Figure 4.9: *Hearsay Expressions' Occurrence Comparison in between the Three Files*

In these files, hearsay expressions are widely used by interlocutors. As shown by the chart above, the frequency of these expressions in the Letter is about five times lower than the frequency of occurrence of these expressions in the hearings each alone.

As observed in this section, the percentages of frequency of evidentials in both Transcripts are not identical but approximately equal, and highly divergent from the percentage of frequency of evidentials in the Letter. In other words, the comparison of the frequency of use of evidentials in three corpora leads to the confirmation of the approximate results in both transcripts that form the spoken corpus in this research, and settles the divergence in use of evidentials in the written corpus. Thus, as far as this genre is concerned, the evidentials are more frequent in spoken corpus than in written ones.

Consequently, both transcripts (T1 and T2) are considered as spoken corpus when dealing with segments of the corpus in the coming sections. In the following section, all of the investigated evidentials types are studied from the perception of choice and use regarding the context.

4.1.2.3 The occurrence and use of evidential expressions in the corpora. The study of the occurrence of these expressions in the segments clarifies the reason for their use. Simply put, the use of these expressions would undoubtedly serve for specific objectives, mostly speaker’s goals.

In the following sections, evidential expressions are quantitatively and qualitatively studied and interpreted. Firstly, the frequency of these evidentials in the written and spoken corpus and their distribution in the segments are discussed. And then, the interpretation of the utility of these expressions in terms of choice and use regarding the interlocutor(s) is exposed. This is to say that in the following section, belief evidentials analysis is conducted respectively: first, belief evidentials are inspected in the whole corpora and in the segments of the written and spoken genres separately, as a quantitative insight into the occurrence of Belief. Then, as a qualitative insight, the evidential expressions (see Appendix B) are interpreted in the aim of deducing the speaker’s aim or reasons after such a choice of evidential.

4.1.2.3.1 Expression of Belief in the corpora. As previously seen, in the second and third chapters, belief expression as a mental process is distinguished in this research as thinking, knowing, and believing. Therefore, in the layer building phase, belief annotation layer was divided into Thought, Conviction (belief), and Knowledge sub-layers. However, other sub-layers were observed and added, namely Shared-Knowledge and Comprehensiveness, because of their implication in the belief as mental processes.

Correspondingly to Belief layer subdivisions, the following subsections are built. Each of the subdivisions is quantitatively and qualitatively considered in the written and spoken corpora, separately. The following table details the presence of belief expressions in the three files used.

Table 4.39: *Belief expressions’ occurrence in the corpora*

BELIEF- -TYPE	Letter		Transcript 1		Transcript 2	
	N	Per 1000 words	N	Per 1000 words	N	Per 1000 words
Thought	18	0.031	215	4.742	155	3.153
Conviction(belief)	338	0.773	41	0.904	20	0.406
Knowledge	16	0.042	26	0.573	32	0.651
Shared-knowledge	3	0.007	46	1.036	56	1.159
Comprehension	57	0.151	23	0.507	18	0.366
TOTAL:	153	1.507	352	7.764	282	5.736

Belief expressions are numerous and five types are distinguished in the corpora. The following figure clarifies in a better and less complicated way the numeral findings.

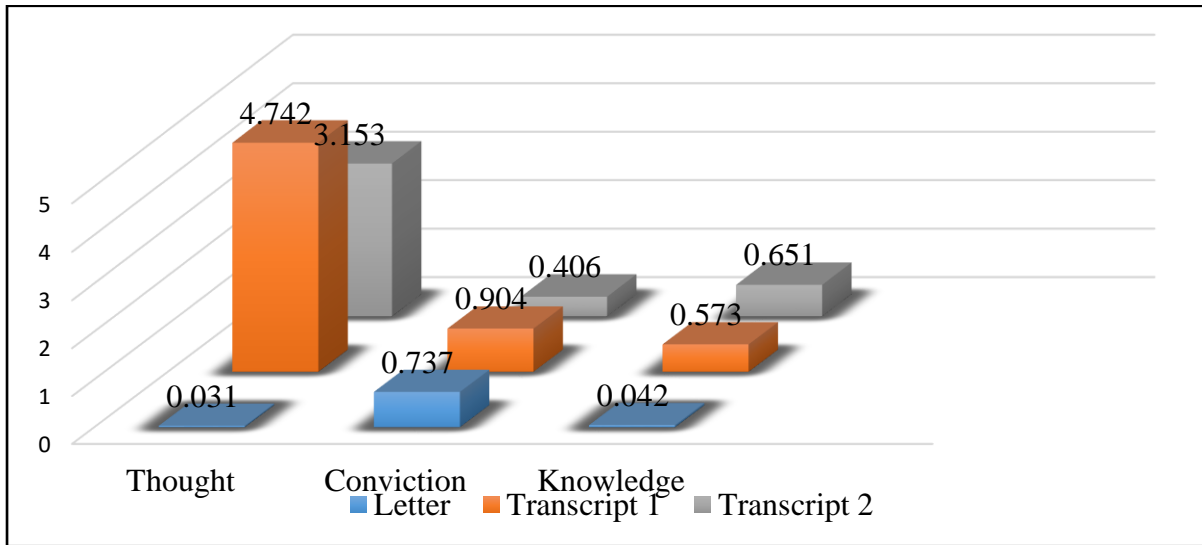


Figure 4.10: Belief Expressions' Frequency of Occurrence (per1000wds) in the Three Files

As shown in this chart, Thoughts expressions are very frequent in T1, with a frequency of 4.742 markers per 1000 words, and T2 with a frequency of 3.153 markers per 1000 words. However, in the written corpus, it shows a low frequency of 0.031 markers per 1000 words. However, approximately the ratio of use of Conviction markers in the corpus are: 0.904 markers per 1000 words in T1, 0.406 markers per 1000 words in T2 and 0.737 markers per 1000 words in the Letter. Whereas, knowledge expressions are frequently used in T2 for 0.651 markers per 1000 words, 0.573 markers per 1000 words in T1, and 0.042 markers in the Letter.

It is worth noting that the chart above is drawn based on the frequency of use of evidentials compared to the size of the corpus; i.e.: the frequency of occurrence of the evidential marker in 1000 words of the corpus. This method remains effective with the aim of showing the differences between the occurrence of those evidentials in the corpus files. This leads to the observation that belief evidentials are used in relation to the context of the hearings. This is to say that the difference in use of these evidentials must be significant. Though, when the talk is about 'privacy and data use', thought and conviction (belief) expressions are greater than knowledge expressions. However, when the congress dealt with 'Russian break into the platform', thought and knowledge expressions were higher than conviction (belief) expressions. Yet, no conclusion can be made at this level, since the interlocutors are not distinguished. In the following subsections, the study of the use of evidentials is built with respect to the segments

of the legal documents, where each segment is reserved to a specific interlocutor(s). The first type of belief that is seen in this section is Thought expression.

4.1.2.3.1.1 Expression of Thought in the corpora. Thought expressions in the corpora are the highest evidential type used. As previously mentioned, the first corpus that is investigated in terms of occurrence of thought expressions is the written corpus and then it is followed by the spoken one.

4.1.2.3.1.1.a Thought expressions in the written corpus. This subsection considers thought expressions in the written corpus.

Table 4.40: *Thought expressions' occurrence in segments of the written corpus*

THOUGHT-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Thought-evidentials	0		11		7		0	
Total	18							

In general, thought expressions (see Appendix B) in the written corpus are modestly utilized. A total of 18 expressions in a corpus of 375.486 words. In the Answering part, seven Thought expressions are used by Facebook team. Whereas, in the Questioning part 11 Thought expressions are communicated by the questioners (question senders).

In the questioning part of the Letter, the questions senders communicated their thoughts on two main points. The first, the most common thoughts about the situation of the platform. The questions askers have had some doubts, or still have had problems with figuring out the riddle of this company, its policy, the data collected, the stolen data and the reasons for such a breach. Some question askers were struggling between what is the right question to ask, and some had no idea about the complexity of the issue with this platform, so s/he communicated the thought as past thoughts using the past tense. Consider:

I think that the basic question is: "What is the potential impact of having this data stolen?"

I thought that information collected by FB or an App, would be general, telling something like guys preferred black ties with polka dots so manufacturers could make them and sell them like hot cakes.

The second point, questions askers used expression of thought to share their critical thoughts about Facebook, like in:

I think social media is disastrous for personal privacy and consider Facebook to always have been the worst offender.

Thought expressions used by the questions-askers indicate that the questions-askers are not the right people to be asking, i.e.: computational experts would have asked more interesting questions and, consequently, more pressure on the Facebook team could be made. The expressions of thought show askers' modest knowledge of the domain (incompetence in computing). Thus, the questions reflected un-equivalence between questioner and responder.

The Facebook team also shared some expressions of thoughts with the aim of expressing their present thoughts. They declared their thoughts on the importance of showing ads to users and giving them access to their own information. Consider this expression:

We also think it's important for people to be able to see the other ads a Page is running, even if they're not directed at them.

Thus, with no consideration to what the users would prefer, this platform has decided to continue showing ads because they (Facebook Team) think that it is important for people. More importantly, those ads are being shown despite the clients' carelessness about what they (ads) show or commercialise. This is to say that there is an issue with 'authority'.

However, Facebook Team used the expression below several times:

we also think it's important to give people access to their own information, which we do through our Download Your Information and Access Your Information tools, Activity Log, and Ad Preferences, all of which are accessible through our Privacy Shortcuts tool

In this expression, Facebook Team (FT) expressed its thoughts about the importance of allowing people to see their own information through DYI. In other words, people's own information that are being collected and, allegedly, stolen or sold, are being accessible to their owners.

The expressions of thought in the answers part of the Letter reveal that Facebook team have shown no respect to all what has been said by congress, i.e. the congress and users' demands for users' privacy and settings of ads showing (dis/approval by the user) are neglected. This means that throughout their expressions of thoughts, they (FT) provided their complete negligence about their users' willingness for privacy and wellbeing. The following subsection focuses on the occurrence of thought expressions in the spoken corpus.

4.1.2.3.1.1.b Thought expressions in the spoken corpus. In this subsection, the occurrence of thought expressions is studied. As shown in the following table adopted from the UMA corpus tool, thought expressions in the spoken corpus are impressively utilised. The total amount of thought expressions is 370 expressions.

The spoken corpus as previously seen is composed of Committee opening statements, Witness opening statements, Committee questioning statements, Witness responding statements and Committee closing statements. In these divisions of spoken corpus, Thought expressions were annotated, calculated using UMA corpus tool and tabulated. Consider the table below:

Table 4.41: *Thought expressions' occurrence in segments of the spoken corpus*

THOUGHT-TYPE	Committee-opening-statement			Witness-opening-statement			Committee-questioning-statement			Witness-responding-statement			Committee-closing-statement		
	N			N			N			N			N		
Thought expressions	2			0			146			221			1		
Total	370														

Thought expressions are utilised, as shown in this table. In the Responding statements, the witness expressed 221 expressions of Thought, which is the highest amount of evidentials used among the three files. On the other hand, committee members used 149 expressions, 146 among the later are used in the Questioning statements and two expressions in the opening statements and one unique expression of thought in the Closing statements.

In the committee questioning part, through thought expressions' use, the committee members shared their admiration and reluctance, in addition to their perception of the situation and other potential solutions. The committee members conversed some thought expressions in the aim of praising the witness and his company, consider:

and I think you have built an extraordinary American company and you've done a lot of good

Whereas you will be able to see now on Facebook whether this campaign or third party is saying different messages to different types of people, and I think that that's a really important element of transparency.

They also expressed some critics towards the company's principles, like in:

One of the problems here, in my mind, is that Facebook's history, the privacy -- user privacy and security have not been given as high priority as corporate growth, and you have admitted as much.

In between admiration and reluctance, congressmen/congresswomen uttered some expressions that had both positive and negative insinuations, like the following:

I think as you've aged you might be a little bit less idealistic and optimistic than you were when you - when you started Facebook

In this utterance, the committee member projected one of the two probable insinuations: the first, the witness has lost hope, "aged", and has learnt that his dream of a community that gathers the whole world cannot be peacefully achieved, and that the idealistic and optimistic company that he has repeatedly mentioned has not been built. And if so, the witness has opted for financial profits. Or, the second, that the witness has matured and changed from the 'allegedly', 'idealistic', and 'optimistic' person that he was, based on the allegations about the story of the emergence of Facebook and the CEO's partners' parts that have been stolen by the CEO. In the meaning that he has never been idealistically straight to construct an idealistic company, but he might have matured after making a such wealth. Thus, the senator must be insinuating that this is the time to behave like an idealistic person, as he has always been pretending.

Another expression of thought that also has positive and negative probable insinuations, consider:

I think about 140 million Americans get their news from Facebook.

This utterance indicates that Facebook is seen as relevant, accurate, and reliable by approximately 140 million Americans. However, it can also be used to say that the news shared on Facebook should not be faked because about 140 million Americans are informed through this platform.

Unlike these hearer-addressed utterances, committee members expressed through thought expressions their perceptions and understanding of the events that have led Facebook to this position. Some have stated that the reasons for such problems are the interference of both people's expectations and business, such as:

I think it is often characterized as maybe these mistakes happened because there is some conflict between what people want and business interests

Other committee members explained that this is a result of the violation of Cambridge Analytica. They shared the need to investigate with them in:

I actually think that we need to fully examine what Cambridge Analytica did.

Some members expressed their doubts about the central points that they should have been focused on, like in:

to my mind, these are questions that we should ask or be focusing on

One of these points that is seen as important for the discussion is the suitable regulatory law as stated:

I think the real question, as the Internet becomes more important in people's lives, is what is the right regulation, not whether there should be or not

Another important topic of discussion was people's unawareness of the gravity of the violation of their privacy, as stated in:

I think the point has been well made that people really have no earthly idea of what they're signing up for

However, some senators have implicated themselves with it, like in:

I think every lobbyist in town is involved in this hearing in some way or another, a lot of powerful interests

This means that some senators that the speaker knows (or the speaker him/herself) are implicated with Facebook and the hearing.

The study of thought expressions of the committee members would not be centred and clear as one person's expressions might be. This is to say that the un-alliance of members is considered. That is why it is believed that the common points shared by the members would not be hazardous. These common points mostly talk about the unfamiliarity of committee members with the set of issues and problems to be solved, or even the hearings objectives. Furthermore, some have praised the interference of Facebook in the election, which is contradictory to what the congress is trying to address. Though, some were asking themselves about the suitable questions to be asked. If this leads to a point, it must be the committee members' un-alliance and the satisfaction of the witness for the 'lobbyists' indeterminacy.

In the witness responding statements, the witness frequently used thought expressions. The use of these expressions was dedicated to self-representation as good and innocent. Consider the following excerpts:

We are good I just think about my own experience. When I was starting Facebook I had one choice of an internet service provider

In this expression the witness tried to express that Facebook is/was designed when he had no choice. This means, if Facebook is imperfect, that is because it was created in a time where the witness had modest objectives and knowledge about platform construction, and narrow choices of access to a certain dimension of the internet. Despite the existence of a unique internet provider, Facebook has become a huge virtual community. He also repeatedly said:

I think Facebook is safe

Still, the safety of Facebook is a thought in the view of the CEO. Furthermore, he expressed the need for privacy protection as a thought, consider:

I think everyone in the world deserves good privacy protection

Also, the CEO expressed a kind of feeling of responsibility. Consider:

So even though we didn't do it, I think we have a responsibility to be able to prevent that and be able to take action sooner

This is to say that throughout the expression of thought the witness shared that his company is safe, where he had no determinate knowledge about the safety of Facebook. And, he communicated the thought of the merit of privacy protection. In addition, he expressed a feeling of guiltiness preceded by an utterance that indicated innocence. These expressions were communicated with the aim of reflecting a good image on Facebook.

The witness also shared through the expression of thought the image of a respectful and submissive enterprise towards law, like in this excerpt:

I think we need to take a broader view of our responsibility around privacy than just what is mandated in the current law

I think legislation is necessary

The witness also declared that they committed mistakes. They have misperceived their responsibilities, and have furthermore been less cautious and naïve in believing Cambridge Analytica. By saying:

I think the big mistake that we've made looking back on this is viewing our responsibility as just building tools, rather than viewing our whole responsibility as making sure that those tools are used for good

I think we clearly viewed it as a mistake that we didn't inform people and we did that based on false information that we thought that the case was closed and that the data had been deleted

Relevantly to the questions congress members asked, the witness referred to advertisements on Facebook as being a part of Facebook's mission. Consider:

We think offering an ad-supported service is the most aligned with our mission of trying to help connect everyone in the world, because we want to offer a free service that everyone can afford

Some of the thought expressions used by the witness to express the need to follow-up with the team for more information, like in this excerpt;

I think we should have our team follow up with - with yours to - to discuss the details around that more

Generally, the witness used thought expressions to express his thoughts about the company that he sees (or pretends) that it is safe, innocent and legally regulated. He also stated that the mistakes that they have committed are because of their trust in others (bad platforms and people). Concerning advertisements on Facebook that have led to political issues, the witness stated that ads are a source of financial benefit that make the platform free for users. In the following subsection, the second type of belief expressions, namely conviction expressions, is studied, interpreted, and discussed.

4.1.2.3.1.2 Expression of Conviction. The expression of conviction is the expressions where belief markers are used to reflect the mental process of believing or having faith in something. In this section, this type of belief evidentials are studied from a quantitative and qualitative perspective with the aim of extracting the maximum of information about the reason behind the use of such a mental process in referencing information in such a genre (legal discourse). In the same way to the first type of belief studied (Thought), this type (conviction) is considered.

4.1.2.3.1.2.a Conviction expressions in the written corpus. Expression of Conviction in the written corpus represents the highest amount of evidentials. It is used 338 times. As exposed in the table below, 331 conviction expressions are expressed by Facebook team. However, seven expressions of Conviction are used in the Questions part.

Table 4.42: Conviction Expressions’ Occurrence in Segments of the Written Corpus

BELIEF- -TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Conviction	0		7		331		0	
Total			338					

The questions askers modestly used belief to talk about their belief in the need for a strong privacy and the precautions use of AI to better safety on media. Consider these excerpts:

we believe industry should follow and promote when building and deploying AI systems

We believe that everyone has the right to expect strong protections for their information, and that we also need to do our part to help keep our community safe, in a way that’s consistent with people’s privacy expectations

However, in the answering part, a considerable number of belief expressions is utilised by the

responder. The Facebook team expressed their belief in the importance of people's awareness about their data control and use. Consider:

Our approach to control is based on the belief that people should be able to choose who can see what they share and how their data shapes their experience on Facebook

We believe everyone deserves good privacy controls

Furthermore, Facebook team insisted on the belief in the principles of their company. Like the diversity of ideas by repeatedly stating:

We believe it's important to amplify the good effects of social media and mitigate the bad-to contribute to the diversity of ideas, information, and view points, while strengthening our common understanding

They also insisted on belief in ads' usefulness and relevance, and stated:

we believe it will further our efforts to combat discrimination by giving people the opportunity to see ads regardless of whether they are in the target audience

We also believe the ads you see across the Facebook family of apps and services should be useful and relevant to you

The team also talked about AI tools and their belief in its implementation in developing the safety of technology, as seen in this excerpt:

We believe AI tools is the scalable way to identify and root out most content that violates our policies

In the Letter, the questioners communicated some expressions of belief to express their convictions about the need for a strong privacy and the use of AI to better safety and deal with cyber-abuses. Unlike, in the answering part, belief expressions are utilised to share the belief in the importance of people's awareness about data control, the principles of the company and the benefits of AI tools in developing the safety of technology. These later are the main points shared as belief in the written corpus. In this subsection, conviction expressions are reconsidered in the Letter. Thus, in the next subsection, these expressions are considered in the Hearings' Transcripts.

4.1.2.3.1.2.b Conviction expressions in the spoken corpus. In the spoken corpus, Conviction expressions are modestly used. A total of 61 conviction expressions are pinpointed in different segments of the spoken corpus, as shown in the table below, adopted from the UMA corpus tool and adapted.

Table 4.43: Conviction Expressions Occurrence in Segments of the Spoken Corpus

CONVICTION EXPRESSER	Committee-opening-statement	Witness-opening-statement	committee-questioning-statement	witness-responding-statement	committee-closing-statement
	N	N	N	N	N
Conviction expresser	2	1	23	35	0
Total	61				

This table demonstrates that in the responding statements the witness expressed 35 expressions of conviction, and one expression in the opening statement. Likewise, nearly the same amount was used by committee members. They shared 23 expressions when asking questions, and two expressions when opening the hearings.

The study of Conviction expressions in Hearings’ Transcripts is focused on the choice and use of these evidential expressions. The committee members used belief expressions in the questioning statements for the aim of expressing their belief in the good intentions and capacities of the company and owners, as provided in:

we do believe that it is critically important for you to be a leader in these solutions

I Believe you are sincere that you personally place a high value on consumer privacy and that that personal commitment is significant at Facebook today, coming from you, given your position

I do believe that was the intention and objective of your company

They also communicated through conviction expressions the need to change this situation, like in these excerpts:

I believe it's important to tell people exactly how the information that they share on Facebook is going to be used

I believe we need to have laws and rules that are sophisticated as the - the brilliant products that you've developed here

I believe that if Congress enacts privacy standards for technology providers, just as we have for financial institutions, healthcare, employee benefits, et cetera, the policy should state that the data of technology users should be held privately unless they specifically consent to the use of the data by others

I believe that people should have the ability to choose to share their data how they want, and they need to understand how that is working

Some congressmen/women shared through belief expressions the obligations of Facebook that reflects a kind of inclination towards American population and political parties, as seen in these excerpts:

I believe Facebook is an American company, and with that, I believe you've got a responsibility to protect American liberties central to our privacy

I also believe that that person who may have looked the other way when the whole social graph was extracted for the Obama campaign, if they're still working for you, they probably shouldn't, or at least there should be a business code of conduct that says, you don't play favorites, you're trying to create a fair place for people to share their ideas

However, Belief expressions are used by the witness in sharing about the data processing and control by the clients. He uttered:

I believe that you already have that control

We believe that everyone around the world deserves good privacy controls

The witness expressed belief in data owning and management by the clients. He insisted on sharing the belief in the good intentions of the way the platform works and their alleged explicitness about the use of data in the consent. Consider:

I believe deeply in what we are doing

I believe that - that we rolled out this developer platform, and that we explained to people how it worked, and that they did consent to it

that we believe that we are in compliance with the consent order

In the Hearings’ Transcripts, conviction expressions are used by committee members to share their belief in the good intentions and capacities of the company and the company’s commitment towards Americans. Unlike, the witness conversed some belief expressions to talk about the users’ data procession and control. He also insisted on clarity and good intentions of the company about the ethical use of data. In the following subsection, another type of belief expressions type, namely knowing evidentials expressions, is studied.

4.1.2.3.1.3 Expression of Knowledge. Knowledge expressions are investigated in the corpus in the same way as other (previous) Belief evidential types are studied. Though, the investigation of Knowledge expressions in the written corpus is the following subsection.

4.1.2.3.1.3.a Knowledge expression in written corpus. Knowledge expression are minimally expressed in the written corpus. Only 57 expressions are used by questioners and Facebook team. The following table exposes the distribution of these expressions in the segments of the Letter.

Table 4.44: Knowledge Expressions’ in Segments of Written Corpus

KNOWLEDGE- EXPRESSION- STRUCTURE	Introduction		Question		Answer		Conclusion	
		N		N		N		N
Knowledge		0		6		51		0
				57				

It is made visible by the table above that the Answers part is reinforced by 51 knowledge expressions, whereas, in the Questions part, a total of six expressions are utilised.

In the questioning part, questioners opted for the use of knowing expressions to declare their awareness of specific information about the way the platform generally works. Consider these excerpts:

we know what information goes in the algorithm and what comes out,

We know Facebook uses contact information to suggest people users can connect to.

They also shared that they are aware of Russian interference in elections of 2016, consider:

We now know that fake accounts were part of Russia's manipulation of the 2016 election.

we know from this experience that just because a company should do something they won't unless it
A: makes them more money or B: is required by law.

They They used these knowing expressions to tell the Facebook team to feel free to expand on those topics, and that those topics are not confidential anymore. However, the expressions of knowledge expressed by the members of the congress somehow reflected their lack of knowledge about the issues with Facebook.

In the answering part, the team generally used knowing expressions to talk about electoral issues. The expressions of knowledge on the part of the team would generally imply comprehensiveness and control of the situation, and this control would generate a feeling of security to the hearers. Consider these excerpts:

Facebook's security team has been aware of traditional Russian cyber threats for years and has actively investigated and responded to these concerns", and "but we know that there are actors working to interfere with those conversations and undermine our elections

Knowing expressions are used by the Facebook Team to share in their competence and control over the situation, and knowledge about the elections and foreign interference. Consider these excerpts:

Facebook's security team has been aware of traditional Russian cyber threats for years and has actively investigated and responded to these concerns.

In the past, we have been aware of scraping as an industry issue, and have dealt with specific bad actors previously.

We know the chances of finding a missing child increase when more people are on the lookout, especially in the critical first hours.

but we know that there are actors working to interfere with those conversations and undermine our elections.

For years, we had been aware of other types of activity that appeared to come from Russian sources—largely traditional security threats such as attacking people's accounts or using social media platforms to spread stolen information. |

In the questioning part, the members utilised knowing expressions to declare their awareness of specific information about the way the platform generally works. However, these expressions reflect the extent to which they ignore some details. Yet, in the team answering part, the witness generally used knowing expressions to talk about electoral issues and foreign interferences to indicate comprehension and control over the situation at the time of speaking. In the following subsection, knowledge expressions in the spoken corpus are studied and interpreted.

4.1.2.3.1.3.b Knowledge expressions in the spoken corpus. One of the types of Belief evidentials is the expression of Knowledge. In the following, knowledge expressions in the spoken corpus are considered.

Table 4.45: Knowledge Expressions Occurrence in Segments of the Spoken Corpus

KNOWLEDG E- EXPRESSION -STRUCTURE	committee -opening- statement		witness- opening- statement		committee- questioning -statement		witness- responding -statement		committ ee- closing- stateme nt	
	N		N		N		N		N	
Belief-	1		2		37		17		1	
	58									

As exposed by this table, 58 expressions of knowledge are used in the spoken corpus. These expressions are utilised by both Committee Senators and the Witness in different segments of the corpus. The greater number of 37 expressions are used by the committee members in the questioning segments. Whereas, two other expressions are used by the chairmen in the opening and closing segments. Yet, 19 expressions were uttered by the Witness, two expressions in the opening statements and 17 expressions in the answering parts.

In the questioning parts of the Hearings, the committee members conversed some information through the use of knowledge expressions. They used this type of evidential expression to express comprehension and sympathy with the witness and knowledge about the situation.

Committee members used knowing expressions to tie up some affectual relations with the witness, as provided in the following excerpts:

1Mr. Zuckerberg, I remember well your first visit to Capitol Hill, back in 2010

I know we both wish we had met under a different set of circumstances

I sincerely know in my heart that you do believe in keeping all ideas equal, and you may vote a certain way or not, but that doesn't matter

I know the best commanding officers, the best skippers, the best CEOs have that exact same attitude

I know it is a long and grueling process, and I appreciate your cooperation

I know you can't control everything

In addition, congress members shared knowledge they acquired about Facebook's functioning process. As shown in these excerpts:

I do know: You have trackers all over the web

I am aware of two class action lawsuits that Facebook has settled relating to privacy concerns

But it's also the reality that Facebook is a for-profit entity that generated \$40 billion in ad revenue last year by targeting ads

I know you understand that there is a growing distrust and I know a lot of civil rights organizations have met with you about Facebook's sense of urgency to address these issues

I know you've employed some new algorithms to target bots, bring down fake accounts, deal with terrorism, things that you've talked about in this hearing

In the witness responding statements, knowing expressions are used by the witness to reflect the company's good intentions and the attempts to handle challenges in some utterances, like in:

I know we try to delete it as quickly as is reasonable

I know, when we address these challenges we'll look back and view helping people connect and giving more people a voice as a positive force in the world

Although I know that we did help out the Trump campaign overall in sales support in the same way that we do with other companies

The CEO expressed knowledge of what the company needs to do to better its performance, like in:

We know we should have a more restrictive platform, where people cannot also bring information from their friends and can only bring their own information

we know that there are issues with content like this that we need to do more proactive monitoring for

The witness's use of knowing evidential expressions is narrowed to the company's good intentions and awareness about required actions to do. The expressions mainly reflect control over the situation.

To wrap up these observations, the committee members transmitted through the use of these expressions of knowledge their realisation of the situation and the witness's uncomfortable position. They also used these expressions to share knowledge about Facebook's functioning process. Differently, the witness shared certitude about the company's good intentions and the need to better its performance.

When dealing with Belief markers, other aspects seem important to also be analysed. These two aspects reflect the notion of a mental process concerned with shared-knowledge and comprehension, which are considered in two succeeding sections respectively.

4.1.2.3.1.4 Expression of Shared-knowledge. In this section, shared-knowledge expressions are considered. As shown in the table and chart below, these expressions are rarely used in the Letter. However, in the Hearings’ Transcripts a considerable amount of 46 and 56 expressions is observed in T1 and T2, respectively.

Table 4.42: Shared-knowledge expressions’ occurrence in the corpora

BELIEF- -TYPE	Letter		Transcript 1		Transcript 2	
	N	Per 1000 words	N	Per 1000 words	N	Per 1000 words
Shared-knowledge	3	0.007	46	1.036	56	1.159

This table is reconsidered in the form of a graph for a better visualisation.

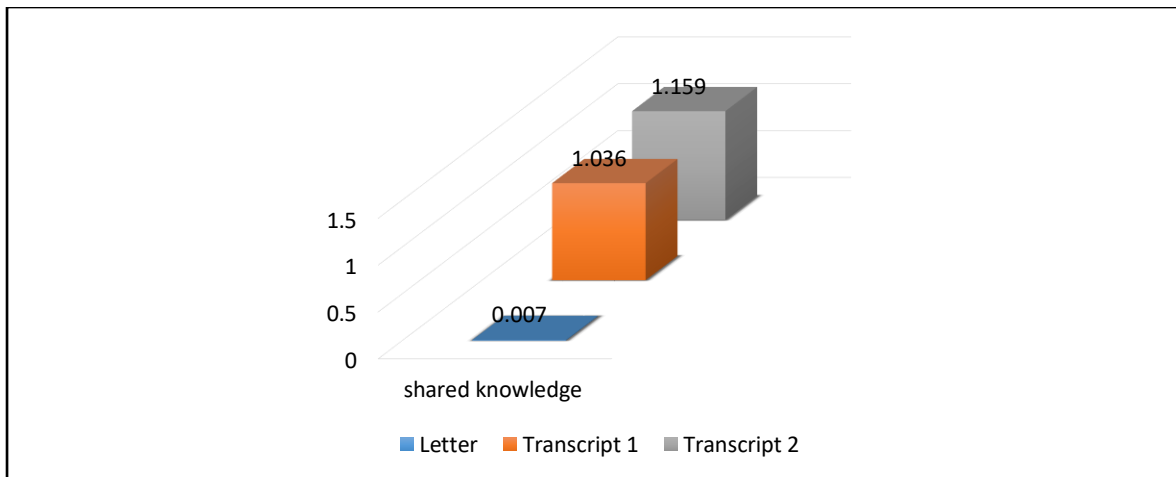


Figure 4.11: Shared-knowledge expressions’ occurrence in the corpora

In the following subsections, Shared-knowledge expressions’ occurrence is studied and interpreted in the written and spoken corpora, respectively.

4.1.2.3.1.4.a Shared-knowledge expressions in the written corpus. A total of the three expressions of shared-knowledge are used by the questioners, as shown in the table below:

Table 4.43: Shared-knowledge Expressions Occurrence in the Letter

BELIEF- EXPRESSED-TYPE	Introduction			Question			Answer			Conclusion		
	N			N			N			N		
Shared-knowledge	0			3			0			0		

In the Letter, the shared-knowledge expressions are used to indicate a situation or information known to a certain party or for all, or to hedge the validity of the information shared, as shown in these excerpts:

I would not be the first to say that I think Facebook could do better at each of those things, but in fairness

This expression is mostly used to say that a lot of people agree with the question asker on the point that Facebook is not doing the best it could do. It is communicated as a shared knowledge/thought. However, it is also an implication of hedging the responsibility of communicating this information.

Also, this expression was used by a questioner:

It's widely known that your company is under investigation once again by the Federal Trade Commission

This expression of shared knowledge implicates a kind of shrinking the hearer's company, and stating that it is involved in bad actions with the FTC (Federal Trade Commission). The expression also reflects the repetitive act of implication in judicial follow-ups.

In the Letter, generally, the question askers communicated some shared-knowledge expressions to reflect the awareness of specific issues and to hedge the responsibility for the credibility of the information communicated. Some expressions are shared to reduce the value of Facebook and its complicity in data unethical use.

Differently, in the hearings the interlocutors communicated a large amount of shared-knowledge expressions. The following subsection deals with these expressions in the spoken corpus.

4.1.2.3.1.4.b Shared-knowledge expressions in the spoken corpus. A total of 102 expressions of shared-knowledge were utilised in the hearings’ Transcripts. As shown by the following table, committee members used 85 expressions of shared-knowledge. However, the witness shared only 17 expressions.

Table 4.44: Shared-knowledge Expression in Segments of the Spoken Corpus

BELIEF-TYPE	committee-opening-statements		witness-opening-statements		committee-questioning-statements		witness-responding-statements		committee-closing-statements	
	N		N		N		N		N	
Shared-knowledge	4		0		77		17		4	
Total	102									

Regarding the context and the used expressions, Committee members used shared-knowledge expressions in different perspectives. They used shared-knowledge expressions to talk about the positives of Facebook and its imperfections, in addition to knowledge about the impact of law and worries about the future. The congress members used shared-knowledge expressions to flatter the witness, as shown in these excerpts:

But, you know, the - the platform you've created is really important

You know, you - you mention you're a tech company, a platform, but there's some who are saying that you're the world's biggest publisher

I appreciate your statements and willingness to, you know, help us figure out a solution that is good for the American people

You know, you are a real American success story

In addition, the shared-knowledge expressions are used by congressmen and congresswomen with the aim of sharing with the witness and the whole world their awareness about the imperfections of Facebook as a platform and company, as well as the CEO’s imperfect steps and decisions, as shown in these excerpts:

You know, you have a long history of growth and success, but you also have a long list of apologies in 2003.

I have heard you say 99 percent, and yet I didn't go out and, you know, look for this, but yet, as recently as March 29, ISIS content was discovered on Facebook, which included an execution video -- March 29

As you know, you have to reinforce your words with actions

It is no secret that Facebook makes money off this data through advertising revenue, although many seem confused by or altogether unaware of this fact

You know, you wouldn't be here if it wasn't for the privacy, people's information and the privacy and the fact that we had -- you had this lapse

The committee members also exchanged interesting insinuations in shared-knowledge expressions. They shared worries and suspicions about the welcome of Facebook to regulations, despite the fact that regulations may not be in the service of dominant hands, and that some of those dominant hands might be present at the hearings and participate by questioning. The committee also shared a kind of skepticism about the efficiency of AI, which is considered by the witness to be the ultimate and perfect solution to his platforms' issues. These observations are shared in the following excerpts:

You know, my - one of my worries on regulation, again, with a company of your size, you're saying, hey, we might be interested in being regulated

But as you know regulations can also cement the dominant power

You know, you have a lot of lobbyists, I think every lobbyist in town is involved in this hearing in some way or another, a lot of powerful interests

But you also know that artificial intelligence is not without its risk and that you have to be very transparent about how those algorithms are constructed

However, the team used shared-knowledge expressions in their literal meaning. He communicated the expressions purely to express common information, as shown in the excerpts below:

And the nature of these attacks, though, is that, you know, there are people in Russia whose job it is - is to try to exploit our systems and other Internet systems, and other systems, as well

you know, I look at my own story of when I was getting started building Facebook at Harvard, you know, I only had one option for an ISP to use

This is to say that shared-knowledge expressions are communicated by the questioners with the aim of communicating people’s awareness about the benefits and drawbacks of Facebook and the CEO’s unsuitable decisions concerning safety. The committee members shared some suspects about Facebook’s welcoming regulations, and worries about the efficiency of AI. Whereas, the responder team replayed those expressions with the aim of expressing common information.

In the same way shared-knowledge is considered, Comprehension expressions are interpreted and analysed in the following subsection.

4.1.2.3.1.5 Expression of Comprehension. In this subsection, Comprehension expressions are reflected in the Letter and in the Hearings’ Transcripts. As shown in the table and chart below.

Table 4.45: Comprehension Expressions’ Occurrence in the Corpora

BELIEF- -TYPE	Letter		Transcript 1		Transcript 2	
	N	Per 1000 words	N	Per 1000 words	N	Per 1000 words
Comprehension	57	0.151	23	0.507	18	0.366

As seen in the table, comprehension expressions are modestly used in the spoken corpus mostly 23 and 18 expressions are conversed. However, these expressions are calculated to 57 expressions in the Letter.

Interestingly, in the Letter the number of comprehension expressions is higher than the amount of comprehension expressions in the Hearings’ Transcripts. However, the chart below shows the differences regarding the volume of each corpus.

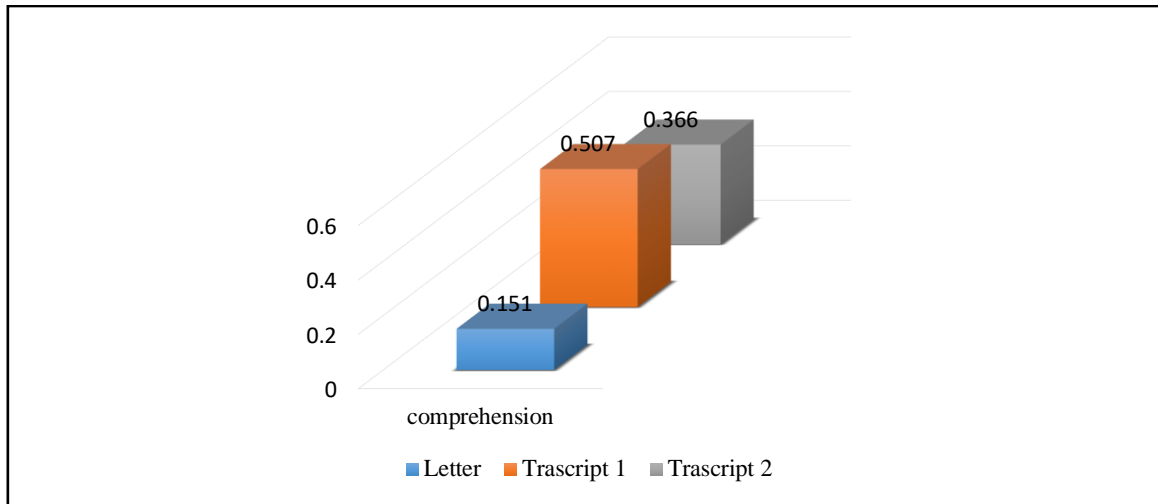


Figure 4.12: Comprehension expressions' occurrence in the corpora

In the following subsection, the occurrence and use of comprehension expressions in the Letter are considered.

4.1.2.3.1.5.a Comprehension expression in the Letter. Comprehension expressions are used by both the questioners and the Facebook Team, as shown on the table underneath.

Table 4.446: Comprehension Expressions' Occurrence in the Written Corpus

BELIEF-EXPRESSED-TYPE	Introduction		Question		Answer		Conclusion	
	N		N		N		N	
Comprehension	0		10		47		0	
Total	57							

In the Letter, the questioners used 10 expressions of comprehension. They opted for sharing awareness about a certain point or knowledge obtained recently (at the time of speaking), as revealed in the excerpts below:

I understand you believe all users could have their data scraped this way

I understand your current business model, it relies at least in part on harvesting the personal data of its users and on targeted advertising

I also understand that the company will now require third-party app developers to sign a contract before asking users for access to posts or other private data

I understand that Facebook has taken some similar steps to curb violent extremists

It is my understanding that Facebook is also conducting audits of applications that had or have access to large amounts of data and will bring in third-party auditors to investigate any suspicious activity

In the responding part, the Facebook Team used 47 expressions of comprehension. The team expressed comprehension, realisation, and recognition when talking about regrets and self-blame. The following excerpts testify:

Particularly in the past few months, we've realized that we need to take a broader view of our responsibility to our community

We recognize that controls are only useful if people know how to find and use them

This is to say that, in the Letter, comprehension expressions are communicated by the questioners in the aim of sharing awareness about a certain information. Whereas the responder team communicated these expressions with the aim of expressing realisation of the situation and recognition of regrets and self-blame.

In the same way comprehension expressions are analysed in the Letter, these expressions are considered in the Hearings' Transcripts in the following subsection,

4.1.2.3.1.5.b Comprehension Expressions in the Hearings' Transcripts.

Comprehension expressions were modestly used in the Hearings' Transcripts, as the table underneath shows:

Table 4.47: Comprehension Expressions' Occurrence in Segments of the Spoken Corpus

BELIEF-EXPRESSED-TYPE	Committee-opening-statement		Witness-opening-statement		Committee-questioning-statement		Witness-responding-statement		Committee-closing-statement	
	N		N		N		N		N	
Comprehension	3		0		23		15		0	
	41									

In the Hearings, Committee members repeatedly used 26 expressions of comprehension in both opening statements and questioning statements. Congressmen/congresswomen utilised these expressions with the aim of expressing knowledge and awareness mostly about Facebook's working process and requirements, as shown by these excerpts:

Most of us understand that whether you are using Facebook or Google or some other online services, we are trading certain information about ourselves for free or low-cost services

in the present case, we recognize that Cambridge Analytica and an app developer lied to consumers and lied to you, lied to Facebook

we've learned now across a number of issues - not just data privacy, but also fake news and foreign interference in elections - is that we need to take a more proactive role and a broader view of our responsibility

Facebook, as I understand it, if you're logged in to Facebook with a separate browser and you log in to another - log in to another article, open a new tab in the browser while you have the Facebook tab open, and that new tab has a Facebook button on it, you track the article that your reading

I understand the data and the information consumers provided to Facebook can be and perhaps is used by algorithms to form assumptions and inferences about users to better target ads to the individuals

I understand how big of an issue this is

However, the witness in his responding statements used 15 expressions of comprehension where he expressed his perception of the events or knowledge with uncertainty. The following excerpts clarify the point:

My understanding is that - is not that this was a violation of the consent decree

my understanding is we're blocking them from doing business on the platform

my understanding of what - the heart of what they're really getting at, is do we feel responsibility for the content on our platform

I understand this enough to - to speak to - to that specific point, and I can have my team follow up with you on the details of that

This is to say that, in the Hearings' Transcripts, comprehension expressions are communicated by the committee members with the aim of expressing knowledge and awareness mostly about Facebook's working process. Whereas, the witness conversed these expressions with the aim of expressing uncertainty about specific points.

Comprehension expressions are the last type of belief expressions investigated in this research. The second mode of knowing investigated is Inference expressions that are interpreted and analysed in the following section.

4.1.2.3.2 Expression of Inference in the corpus. Inference expressions are moderately used in comparison to Belief expressions. The total number of inference expressions is 116 expressions.

Table 4.48: *Inference Expressions' Occurrence in the Corpora*

INFERENCE- TYPE	Letter	Transcript 1	Transcript 2	Total
	N	N	N	N
- Induction	02	11	19	32
- Deduction	15	41	29	85
Total	17	52	48	117

As mentioned in the theoretical part, Inference expressions are devoted to two types Induction and Deduction (see Deduction evidentials section). Both types are the expression of information acquired over observation, the difference between both is the degree of determination. The following subsections treat the use of these evidentials in both written and spoken corpora.

4.1.2.3.2.a Inference Expressions in the written corpus. This subsection describes the quantitative distribution and interpretation of the inference evidentials, as provided by the following table:

Table 4.49: Inference Expressions' Occurrence in Segments of the Written Corpus

INFERENCE-TYPE	Introduction		Question		Answer		Conclusion		Total	
	N		N		N		N		N	Per1000 wds
- Induction	0		2		0		0		2	0.007
- Deduction	0		10		5		0		14	0.037

Inference expressions in the Letter are moderately used. The total number of expressions is 0.05 markers per 1000 words. Induction expressions represent 0.007 markers per 1000 words, whereas Deduction ones stand for 0.037 markers per 1000 words. This means that Deduction expressions are nearly seven times higher than induction expressions. Simply put, the majority of the inference expressions used lack of determinacy.

As seen in the table above, inference expressions are used at the level of questioning and answering parts of the Letter. This means that the questioners opted for the use of two expressions of induction and nine expressions of deduction, whereas the Facebook team expressed five deductive ones and did not express induction expressions.

Induction expressions used by the questioners were a kind of comment on verbiage (hearsay), as shown in the excerpts:

This is obviously a serious allegation

Obviously, Facebook cannot address all instances of bias

These induction expressions are used with the aim of either conforming, or provoking the receiver.

In this corpus, many induction evidential markers are used for non-evidential aim. Consider:

All ads with political content will also clearly state who paid for them

However, Deduction expressions are generally used in the question part of the Letter to express a negative idea. These expressions mostly reflected criticism of the platform, as in these excerpts:

It seems that every few weeks we see a tiny amount of progress being reported, but then the social media bots spring back to life unabated

It's clear to me that using all that data was the whole point, no matter what Facebook claims

Or, critically considering people's unawareness, like in:

it seems clear that a sizable percentage of your user population lacks the cognitive abilities, skills and training necessary for successful self-protection online

On the other hand, in the answering part, deduction expressions are the expression of knowledge based on incertitude. Consider:

these apps appear to be linked to AIQ, which was affiliated with Cambridge Analytica

even with an audit, it may not be possible to determine conclusively what data was shared with Cambridge Analytica or whether it retained data after the date it certified that data had been deleted

To wrap up this point, induction expressions in the Letter are used to comment and share knowledge with hedging its certitude. Whereas, deduction expressions are used to criticise Facebook activities. Yet, the responder team's use of deduction expressions to communicate uncertainty about some responses.

As seen previously, inference expression in the spoken corpus are about six times higher than in the written one. In this section inference evidentials are investigated in the spoken corpus.

4.1.2.3.2.b Inference Expressions in the spoken corpus. As previously seen, the total number of inference evidentials in the spoken corpus were 100 expressions. Among the 100 expressions, 70 are expressing deduction and 30 ones for induction. The table below represents the results:

Table 4.50: Inference Expressions' Occurrence in Segments of the Spoken Corpus

INFEREN CE-TYPE	Committee -opening- statement	Witness- opening- statement	Committee- questioning- statement	Witness- respon- ding- statement	Committee- closing- statement	Total
	N	N	N	N	N	N
Induction	2	1	24	3	0	30
Deduction	5	0	54	8	0	70

This table shows that induction expressions are moderately used by the committee members in the questioning statements, 24 expressions and two expressions in the opening statements. However, only three expressions are used by the witness in the responding statements and one expression in the opening statement.

Also, this table shows that deduction expressions are highly used by the committee members in the questioning statements, 54 expressions and five expressions in the opening statements. However, only eight expressions are used by the witness in the responding statements.

Concerning Induction expressions, in the committee opening statements, on one hand, senators expressed inference. Yet, in the witness opening statement, an induction expression is utilised to express self-blame by the witness. Consider:

But it's clear now that we didn't do enough to prevent these tools from being used for harm" and "it was clearly a mistake to believe them ...

On the other hand, in the responding statements, the witness used the induction expressions in relation to doubts about the issue with Facebook policy, like in:

If they are illegal, they clearly violate your policy

that clearly sounds like a big issue and something that would violate our policies

In the questioning statements, committee members conversed, some induction expressions as a sign on analytical thinking in a situation, as in this case:

And the - the information, obviously, is an important commodity and it's what makes your business work and"advertisers clearly end up having access to that through agreements with you about how they then target ads to me, to you, to any other user

And, other induction expressions are uttered in the aim of provoking the witness. Consider this excerpt:

So, from what we have learned over the past 2 days of hearings, it just doesn't seem like the FTC has the necessary tools to do what needs to be done to protect consumer data and consumer privacy, and we can't exclusively rely on companies to self-regulate in the best interest of consumers" and "You hire people, obviously, based on their ability to get the job done

Deduction expressions used in the opening statements of the committee members mainly addressed the mistakes made by the Tech companies. The expressions clarify the real situation by comparing what the appearance was and what it should have been (the necessity). This is made clear by using the deduction markers "*appear*" and "*don't appear*" in these expressions:

Instead they both appear to be the result of people exploiting the very tools that you created to manipulate users' information

...these two incidents is that they don't appear to be caused by the kind of negligence that allows typical data breaches to happen

Furthermore, the necessity ('what should have been') is also expressed by the markers "*should*" and "so" in these excerpts:

This should be a wake-up call for the tech community

So the effectiveness of these social media tactics can be debated

Yet, in the witness responding statements, majority of induction expressions are uttered as a confirmation of information and self-blame, like in:

But it's clear now that we didn't do enough to prevent these tools from being used for harm.

it was clearly a mistake to believe them ...They clearly do.

If they are illegal, they clearly violate your policy.

that clearly sounds like a big issue and something that would violate our policies.

This is to say that induction expressions are used by the committee members to reflect the real situation throughout analytical thinking of the mistakes made by the company. However, the witness shared induction expressions as self-blame and to confirm information about their policy.

Both Induction and Deduction evidentials serve the act of inference, but deduction expressions worked for different purposes. Deduction expressions in questioning statements are utilised in diverse purposes. Some are used to criticising and blaming the witness and his perception, like in:

it seems that this is disconnecting people in stark contrast to your mission to connect people

so, therefore, you consider my personally identifiable data the company's data, not my data

Though other expressions are used with the aim of giving advice, consider:

it seems to me that putting all privacy control options in a single location would be more user-friendly

Unlike previous purposes, some are used to express disagreement with the point discussed regarding European Law adoption or adaptation. Like in:

I would guess that it would be somewhat different, because we have somewhat different sensibilities in the U.S. as to other countries

so I assume that means you want changes in the law in order to - to effectuate exactly what you talked about?

Furthermore, some were expressed in provoking the interlocutor. Consider:

So it's kind of safe to say that Facebook users don't seem to be overly concerned about all these revelations, although obviously Congress apparently is

However, some were utilised with the insinuation of threat, as expressed in:

I imagine there will have to be a number of them because there are a lot of apps, and they will conduct the audit for us

Differently, deduction expressions in the answering parts of the hearings were uttered to denote uncertainty, like in:

people probably just accept terms of service without taking the time to read through it

If you signed into another app, then that app probably has access to some of your data

reviews content probably made an enforcement error.

And then when you reached out, we probably looked at it again and realized that it violated the policies and took it down.

whereas, some other expressions indicated self-blame, the conditional was used for this purpose. Consider:

if I had to pay extra in order to make it so that my app could potentially be seen or used by other people, then - then we probably wouldn't be here today

if I had to pay extra in order to make it so that my app could potentially be seen or used by other people, then - then we probably wouldn't be here today.

If we'd done it a couple of years earlier, then we probably wouldn't be sitting here today.

To wrap up, deduction expressions are mainly uttered in the aim of criticizing, provoking and blaming the witness. However, the witness shared deduction expressions as self-blame and doubting misunderstandings with the policy of Facebook.

Unlike the considerable amount of inference expressions used, Sensory expressions are the least evidential expressions utilised in these corpora. In the following section, the third evidential type 'sensory' is considered.

4.1.2.3.3 Expression of sensory in the corpora. In this part of the chapter, Sensory expressions are analysed. These expressions are quantitatively described and interpreted in the written and spoken corpora, respectively. The following subsection deals with the expressions of sensory evidentials in the written corpus.

4.1.2.3.3.a Sensory Expressions in the written corpus. Sensory expressions are counted as 21 expressions. All of these sensory expressions are visual sensory evidentials, as seen in this table:

Table 4.51: Types of Sensory Expressions’ Occurrence in Segments of the Letter

SENSORY- STRUCTURE	Introductio n		Question		Answer		Conclusion		Total
		N		N		N		N	N
Visual		0		1		20		0	21

As seen in the table below, 20 expressions are used in the answer part. Whereas, only one expression in the question part. This is to say that the Facebook team chose to use these visual sensory as a reference for a piece of information more than the questioners did.

Sensory expressions in the Letter are the modestly used evidentials in this corpus. In the questioning part, the committee members said:

We ‘ve seen that with a foreign actor

The questioner used the visual sensory evidential marker ‘have seen’ in expressing an experience that has already been lived by a certain group ‘we’. The sener ‘we’ is utilised to signify a certain committee that the speaker belongs to. The later shared the experience (visual phenomenon) that is deictically referred to as ‘that’ to say manipulation throughout fake news in social media. This sensitive topic has, furthermore, been related to another critical subject for any population, namely ‘foreign actors’. To wrap up this idea, the use of visual sensory evidential to reflect a critical subject about security and foreign hands is a sign of the speaker’s feelings of fear, insecurity and non-comfort with social media. Additionally, the question-asker highlighted the drawbacks of social media with the aim of weakening the receiver of the question (Facebook team) and provoking them.

However, the Facebook team used one expression 19 times with the aim of expressing visual knowledge. The information expressed as visual information is:

What we saw early in the 2016 campaign cycle followed this pattern

The expression is communicated as a past visual phenomenon to refer to a past action where the Facebook team informed the government (members) of a suspicious behaviour of some fake accounts (mainly Russian) in the elections of 2016. Facebook declared that the team has previously informed about this foreign interference. Nonetheless, the government has not taken

any serious actions towards the situation, and allegedly, a party of the electoral participants is being implicated with that suspicious activity in the aim of sharing allegedly stolen information to the fans of the other party. The Facebook team has taken the action of reporting this as foreign hands sharing stolen information of unethical behaviour of a certain party. However, no serious actions were taken and Facebook was deemed implicated with inclination towards its preferred electoral party. The Facebook team has repeatedly claimed its innocence and non-inclination towards any democratic party. However, as stated by a congressman during the hearing one of Facebook's employees was fired because of his inclination towards a certain political party that is not the preferred party by Facebook team.

Also, in the answering part, the following visual sensory expression was used:

we started to see new kind of behavior|from APT28-related accounts-namely, the creation of fake personas that were then used to seed stolen information

This expression is a part of a narration of some events, in which Facebook is the victim of many tentative of violations. Facebook team heroically determined the sources of danger and banned them.

To wrap up concerning sensory expressions' use in the Letter. In the answering part, the Facebook Team used visual expressions to recall about incidents where Facebook ethically and correctly reacted. However, those reactions were not reconsidered by the population, and Facebook was judged as involved and un-neutral. These expressions are specifically used to transfer a high degree of certitude and group commitment, i.e.: no personal witness or experience. All of the speakers have used it to raise issues with cybersecurity.

Similarly to the written corpus, the spoken one has also shown important findings. The following part of this section deals with sensory expressions' occurrence in the spoken corpus.

4.1.2.3.3.b Sensory expressions in the spoken corpus. Sensory expressions are calculated to 32 expressions in these Hearings' Transcripts. These sensory expressions are distinguished by 20 expressions of visual evidentials and 12 expressions of oditory evidential.

Table 4.52: Types of sensory Expressions' Occurrence in Segments of the Hearings' Transcripts

SENSOR Y- STRUCT URE	Committee- opening- statements	Witness- opening- statement s	Committee e- questionin g- statements	Witness- responding- statements	Committee- closing- statements	Total
	N	N	N	N	N	N
Visual	0	2	12	6	0	20
Auditory	0	0	6	6	0	12
Total	32					

The expressions of visual sensory that are uttered by the committee members are 12 expressions. However, the witness expressed two expressions in the opening statements and six expressions when responding to the committee’s questions. However, as clearly shown in the table above, auditory sensory expressions are equally used by both committee senators and the witness in the questioning and responding statements, respectively, each used six expressions. In the following, the expressions of visual and auditory sensory evidentials in the spoken corpus are studied, respectively.

Visual sensory expressions in the witness opening statements of the hearings are the same expression that was used twice. This expression is:

we've seen the "Me Too" movement

In this expression, the witness used the sener ‘we’ to talk about shared information about an event. The CEO chose to use this expression to refer to one of the good actions of his company, i.e.: the “Me Too” movement is shared, welcomed and supported by Facebook. This movement was a kind of revolution against sexual, verbal and domestic violence. The reference to this movement in the opening statements is strategic. It aims at showing good action and benefits of the platform.

In the questioning statements, many visual sensory expressions are expressed to share experience. Some are used with the aim of praising the platform and its benefits, like in:

Facebook conducted a couple of years ago an effort in our district in Houston for our small businesses, and it was one of the most successful outreach I have seen

I've always seen technology as a promise to democratize our nation, expand access, expand opportunities

Yet, in the same questioning statements, the congressmen/women conversed by expressing dissatisfaction through visual expressions. Consider:

But unfortunately, we've also seen how platforms, technology platforms like Facebook, can actually be used to double down on discrimination and - and give people more sophisticated tools with which to discriminate

In a similar vein, consider the following expression:

but every time we saw what precautions you have or, in most cases, have not taken your company is caught unprepared and ready to issue another apology

The committee members used these evidentials to indicated dissatisfaction and disappointment. Furthermore, they used these evidentials to share a group's (people) fears and shared experiences, like in:

We saw a large telecommunications company become a near-monopoly in the sixties, seventies, and eighties

we've seen that before...

A congressman opted to touch upon a very sensitive and critical subject for Americans, especially, and people generally. He uttered:

and now we are seeing around the globe an enhanced recruitment of women, as well, to join terrorist organizations

In this expression the speaker expressed the low security precautions that has led to the implication of Facebook in the recruitment of women in the service of terrorists. The speaker voiced this idea as an ongoing action by using the present continuous.

However, in the responding statements, the witness utilised the visual sensory evidential expressions like this expression:

I view us as a tech company because the primary thing that we do is build technology and products

This expression is used to transfer his vision of his company. This expression of vision is communicated with the aim of correcting the hearers' (committee members/people) perception

of the subject talked about, or at least to communicate the truth or company goals. In the same motivation, the following visual expression is used:

I the intent of what we're trying to get at is the foreign election interference we've seen has taken more of the form of issue ads than direct political electioneering advertising view us as a tech company because the primary thing that we do is build technology and products

This expression is communicated to share a vision of the reality (according to the witness) that people are misunderstanding. He explained that the interference of foreign hands in the presidential election were basically ads issues.

Moreover, the witness also used visual sensory evidentials in reflecting past actions where Facebook has heroically and secretly faced, like in the following expression:

we saw, generally, a bunch of app developers who were asking for permissions to access people's data in ways that weren't connected to the functioning of an app

This is to say that the use of visual sensory expressions in the Hearings' Transcripts are mostly used to reflect congressman/congresswomen's experience and feelings, in addition to people's worst fears of insecurity because of terrorism. However, the witness used visual evidentials to share events that reflect positively his company. Simply put, the visual sensory evidential expressions are used by both interlocutors to state their vision of reality. The committee members stated the imperfections of this platform, whereas the witness defended the purity of his company's goals.

Visual expressions, as seen previously, are used more than auditory ones. In the following, the auditory sensory expressions are considered.

In the committee questioning statement, a senator commented on a witness's response by saying:

that sounds really good to me

This is to say that the answer was convincing. The comment also has a nuance of flattery and the speaker's unwilling to be rude to the witness. Though, the witness used auditory evidential to express his comprehension and to explain a situation that is seen differently from how it could/should be seen. This expression is:

it sounds like we made a mistake...

The majority of auditory sensory evidentials used in the spoken corpus serve inference evidential type, like in:

That sounds kind of like a quasi-official thing, to formally certify

it sounds to me as though you would decline

It sounds like it will not be exact

that clearly sounds like a big issue and something that would violate our policies

To wrap up, auditory expressions mostly served inferential aims. However, the few auditory expressions found reflect committee member flattery of the CEO and the witness’s expression of comprehension of the situation. The following section tackles Hearsay expressions, the fourth type of evidential expressions investigated in the corpora.

4.1.2.3.4 Expression of Hearsay in the corpora. Hearsay expressions are studied in this section. The following subsections deal with these expressions’ occurrence and use in the Letter and the Hearings’ Transcripts, respectively.

4.1.2.3.4.a Hearsay expressions in the written corpus. In this subsection, hearsay as a source of knowledge is analysed. A total of 130 expressions of hearsay are used in the written corpus. The table below shows the occurrence of hearsay expressions in each segment of the written corpus.

Table 4.53: Hearsay expressions’ occurrence in segments of the Letter

HEARSAY-MARKER	Introduction	Question	Answer	Conclusion	Total
	N	N	N	N	N
hearsay-expressions	0	79	50	1	130

In the written corpus, as shown in the table, hearsay evidentials are absent in the introduction provided by the Facebook team. Whereas, in the conclusion, they used one expression of hearsay. However, in the development of the Letter, Question/Answer part includes 129

expressions of hearsay. On one hand, the questioning part comprises 79 expressions. On the other hand, 50 hearsay expressions are used in the responding part of the Letter.

In the questioning part, the questioners mostly used hearsays from press reports, hearings testimonies, articles, research, congressional statements and the CEO’s statements, as shown in the table below. Those hearsay expressions are used in the aim of contradicting and opposing Facebook’s position and claims, or investigating the truth of the verbiage. Consider these expressions:

In a March 21, 2018 Facebook post, you stated that Facebook will ban any developer from the Facebook's Platform that does not agree to a full audit or that has misused personally identifiable information

You stated during questioning that you believe the improper release of user information to Cambridge Analytica did not violate the 2011 consent decree

At the April 11 hearing, it was revealed that Facebook's 2 billion users likely had their public profiles scraped

In the answering part of the Letter, the Facebook team opted for the use of hearsay expressions as evidences on the company’s innocence and good-intentions, like in:

Kogan represented that, in addition to providing data to his Pro-sociality and Well- Being Laboratory at the University of Cambridge for the purposes of research, GSR provided some Facebook data to SCL Elections

On June 11, 2016, Kogan executed signed certifications of deletion on behalf of himself and GSR

The responder team reported the company’s policy and the CEO, and the opponents Cambridge Analytica, Dr. Kogan and reputable press as shown in the following table.

Table 4.54: *Samples of participants (reported/receiver) in hearing statements in the Letter*

Participants		
Reported		Receiver
In the question part	In the Answer part	
the April 11 hearing There have been recent Press reports Facebook's previous data policy	As our founder and CEO Alexander Nix, on behalf of SCL in the context of our ongoing review of third-party apps, The Guardian	Me Us You Facebook

<p>You (10) our analysis The company your testimony from press accounts and statements by congressional leaders . Facebook Mr. Zuckerberg, you Congressman Green news outlets from the media from news reports</p>	<p>Cambridge Analytica provided written confirmation to Facebook a representative of the University of Toronto Eunoia (executed by Eunoia Founder Christopher Wylie) The Data Policy The Facebook Data Policy our Promoting or Publicising Crime policy Our Ads policies our Data Policy</p>	<p>The counsel Facebook</p>
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To wrap up this point, the hearsay evidential expressions used by the questioners as evidence on the involvement of Facebook in the users’ data use. In the aim of achieving this point, the questioners mostly used the media and some senators’ reports and Facebook company members’ statements. However, Facebook team used these hearsay expressions with the aim of proving the partial innocence of Facebook. The sources of hearsay used by the team are the Guardian press and some members of the opponents. The following subsection focuses on the use of hearsay expressions in the spoken corpus.

4.1.2.3.4.b Hearsay expressions in the spoken corpus. In this section, the investigation of hearsay expressions used are 215 expressions. This considerable amount of Hearsay expressions indicated a recognition of knowledge acquired through hearsays. The table below shows the distribution of hearsay expressions in the segments of the spoken corpus.

Table 4.55: Hearsay expressions in segments of the spoken corpus

HEARSA Y- MARKER	committee- opening- statements	witness- opening- statements	committee- questioning- statements	witness- responding- statements	committee- closing- statement	Total
	N	N	N	N	N	N
Hearsay	17	2	170	25	1	215

This table shows the distribution of 215 hearsay expressions in the segments of the Hearings’ Transcripts. The committee utilised 17 expressions in their opening statements and 170 expressions in the questioning statements and ended with one expression in the closing statement. Unlike, the witness moderately opted for hearsay expressions, where two expressions in the opening statements and 25 expressions in the responding statements are used.

The analysis of the conversed hearsay expressions in the Hearings' Transcripts is considered. In the committee opening statements, the chairmen opened the congress by stating some allegations, like in:

Professor Kogan is said to have taken data from over 70 million Americans" and "It has also been reported that he sold this data to Cambridge Analytica for \$800,000 dollars

Chairmen also tried to reflect the situation by stating interesting personas, like in:

on February the 16th, Special Counsel Mueller issued an indictment against the Russia-based Internet Research Agency and 13 of its employees for interfering (sic) operations targeting the United States

Also, they quoted the CEO, like in:

We're here because of what you, Mr. Zuckerberg, have described as a breach of trust

You've promised that when Facebook discovers other apps that had access to large amounts of user data, you will ban them and tell those affected

Though, in the questioning statements, many hearsay expressions are utilised. The congressmen and congresswomen opted for hearsay use to share the source of their knowledge, which is mainly based on press and reports, like in:

According to press reports, my home state of Wisconsin was a major target of Russian-bought ads on Facebook in the 2016 election

I'm concerned that press reports indicate Facebook learned about this breach in 2015, but appears not to have taken significant steps to address it until this year

In addition to interesting personas' statements, their opponents' quotes were also used, like in the following:

In fact, the CEO, Alexander Nix, declared that Cambridge Analytica ran all the digital campaign, the television campaign, and its data informed all the strategy for the Trump campaign

Furthermore, the witness's statements and his associates' are also used to confront and put the witness in a contradictory position, like in:

you've said earlier that you support the Honest Ads Act

your chief operating officer, Ms. Sandberg, suggested on the NBC "Today Show" that Facebook users who do not want their personal information used for advertising might have to pay for that protection

However, in the witness opening statements, the witness shared Cambridge Analytica's treason by stating the following expression:

we first contacted Cambridge Analytica, they told us that they had deleted the data

Though, in the witness responding statements, the witness interestingly used no-important hearsay expressions except their opponents' (the platform's violators) declarations, in addition to their policy terms. The reported participants are stated in the table below.

Table 4.56: Samples of Participants in the Hearsay Expressions used in the Hearings' Transcripts

Participants		
Reported		Receiver
In the question part	In the Answer part	
Mr. Zuckerberg,	it	Me
You	Cambridge Analytica	Us
Special Counsel Mueller	They	You
the CEO, Alexander Nix,	We	Facebook
press reports	Dr. Kogan	The counsel
Aleksandr Kogan	You	Facebook
Gizmodo	Research	
you	Our policy	
Your testimony		
It		
you and other officials at		
your company		
Professor Jack Balkin		
there's some past reports		
Facebook		
ProPublica		
Several different senators		

To wrap up, the hearsay expressions are used to reflect the situation by citing some allegations and some personas' statements. These expressions are used as evidence by the committee against the witness. However, the witness used hearsay expressions to state opponents' declarations, in addition to their policy terms with the aim of defending the

company. In the following section, the used evidentials functions are highlighted regarding the context and users.

4.1.2.4 The implication of Evidential expressions by the interlocutors. To discuss the evidential expressions implementation within Manipulation, the quantitative results and the interpretation of the findings are reconsidered in the ongoing section regarding the interlocutors. The table below shows the evidential expressions' frequency of use by each of the Questioners (Q), the Facebook Team (FT), the Committee Members (CM) and the Witness (W). The grades of green colour reflect the frequency from three to 25 expressions a light green, from 26 to 79 expressions medium green, and from 80 and forward a darker green is used. However, the frequency from zero to two expressions are disregarded.

Table 4.57: Frequency of Evidential Expressions Used and Users

EVIDENTIALS-TYPE	Letter		Hearings' Transcript	
	Q	FT	CM	W
Belief				
Thought	11	7	149	221
Conviction	7	331	25	36
Knowledge	6	53	39	19
Shared-Knowledge	3		85	17
Comprehensiveness	10	47	26	15
Inference				
Induction			26	4
Deduction	9	5	59	8
Sensory				
Visual		20	12	8
Auditory			6	6
Hearsay	80	50	188	27

As previously stated, the choice of evidentials, according to Aikhenvald (2007), is the use of a specific evidential when many others can appropriately be used, which is a function of the speaker's sincerity. Furthermore, according to Mushin (2001) and Aikhenvald (2007), the use of evidentials is stimulated by uncommunicated reasons: goals and intention, like hedging. This is to say that the expression of evidentials is supported by the epistemic attitude conveyed by evidentials. In this section, the discussion of evidentials' epistemic value is accredited to the statements of interlocutor(s) based on the research on epistemicity and evidentiality in chapter two, and the contextual interpretation of evidential expressions. The reference to the scale of epistemic values is still not fixed by reserchers, for this reason High (H), Medium (M) and Low (L) as scale are used.

In the following subsection, the discussion of the use of evidentials by Questioners and Committee members is developed.

4.1.2.4.1 Evidentiality use by Questioners and Committee members. The chart below shows the amount of use of evidentials by the same party (interviewers), though, with different personas and in different genres (written and spoken). The results are significantly interesting, where the genre’s characteristics and the speakers’ (or writers’) goals must be implicated. Yet, the emphasis is put upon the global perception of the interviewers’ goal. And, the genre’s characteristics are de-emphasised correspondingly to Bhatia and Salmani-Nodoushan’s (2015) perception of genre ‘dynamicity’ with the aim of freeing the text from the ‘hybrid’ frame of the genre.

Nonetheless, the probability of the reasons for the use of this interesting amount of evidentials by interviewers in the hearings and its absence in the written corpus would fall under the genre’s requirements is acceptable, especially that all of evidential types are less used in the written corpus than in the spoken one.

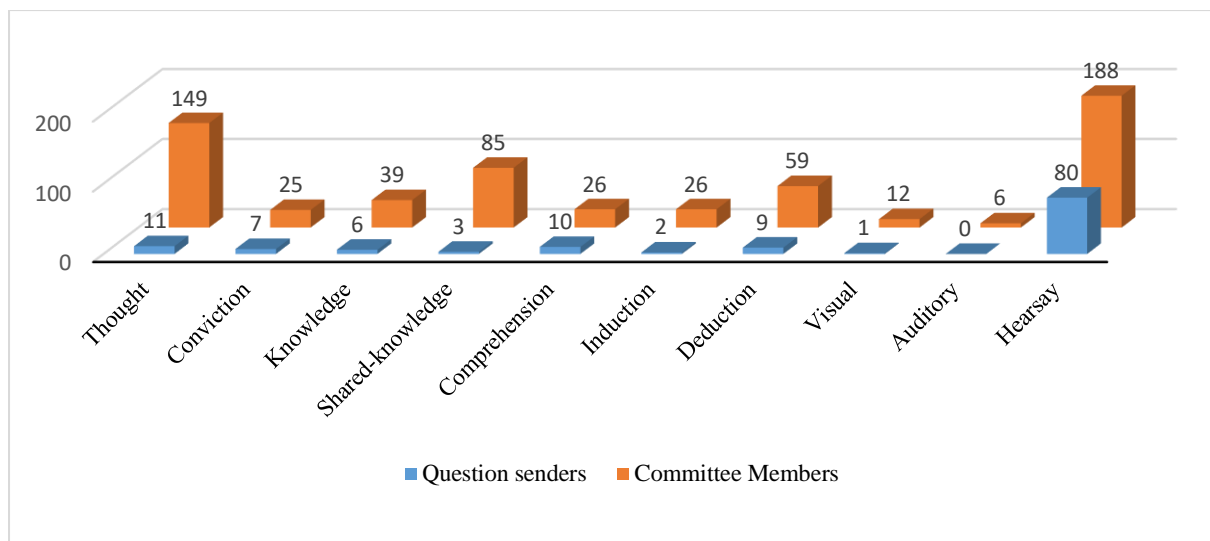


Figure 4.13: Frequency of Evidential Expressions used by Questioners and the Committee Members

As clearly represented by the graph above, the Questioners have based their statements on Hearsay, Thought and Comprehension as modes of knowing. Questioners’ source of knowledge communicated a low reliability, low to medium commitment, and a high to medium hedging, low to medium authority over knowledge and medium certainty, regarding epistemicity grades’ table in chapter two.

In the following table, the evidential sources of knowledge used by the Q are represented where all of the global aims of use, the density of use and the epistemic evaluation are illuminated. This table is built with respect to SFL’s perspective on interlocutors and lexical choices seen in chachapter two.

Table 4.58: Evidential Expressions’ Implication and Conveyed Attitude by the Questioners

Interlocutors choice		Lexical choice	Function of the evidential expression	
Speaker/ Writer	Hearer/ Reader	Evidential source	Function of the proposition in the context/ Implication	Epistemic evaluation
Questioners	Facebook team/ the CEO of Facebook	Thought	The expressions of thought indicate askers modest knowledge about the domain (incompetence in computing).	Reliability: L Commitment: M Credibility: / Hedging: M Authority: M Certainty: M
		Conviction	The expressions of conviction share the beliefs in the need of a strong privacy and use of AI to better safety and deal with cyber-abuses.	Reliability: H/M Commitment: H Credibility:/ Hedging: L Authority: H Certainty: H
		knowledge	The expressions of Knowledge are used to declare the awareness about specific information about the way the platform generally works.	Reliability: H Commitment: H Credibility:/ Hedging: - Authority: H Certainty: H
		Shared-knowledge		
		Comprehension	Comprehension expressions share about awareness about certain information that are used by Facebook stuff as arguments.	Reliability: L Commitment: M Credibility: / Hedging: M Authority: M Certainty: M
		Induction		
		deduction	Deduction expressions are used to criticise Facebook activities.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: M Certainty: L
		Visual		
		Auditory		

		Hearsay	Hearsay expressions are used as evidence on the involvement of Facebook in the users' Data use.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: L Certainty: /
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This table assists the contextual interpretation of the use of the types of evidentials. In case the information shared throughout the evidential type does not denote a clear or significant contextual meaning, the epistemic values interfere. The epistemic notions are considered to evaluate the speaker's implicit attitude towards the information shared throughout this specific evidential type. Thus, in the following, the contextual interpretations of the global goals or reasons after the use of these evidentials are discussed.

- The expressions of thought show (most) askers' modest knowledge concerning the domain (incompetence in computing). This incompetence in computing reflects the image of a non-expert interlocutor.
- The few expressions of conviction reflect the beliefs in the need for a strong privacy and the use of AI to improve safety and deal with cyber-abuse. These expressions of need reflect dependency on experts (like the CEO and Facebook staff) and, thus, a weaker social power.
- The expressions of Knowledge and Comprehensiveness are used to declare the awareness of specific information about the way the platform generally works. These expressions of familiarity with some knowledge are apparently used to reflect the image of knowledgeable individuals. However, these expressions of knowledge used reflect the extent to which the questioners' knowledge about the situation is narrow.
- Deduction expressions are used to criticise Facebook activities. These expressions denote that the imperfections of Facebook and stuff are inferred. Yet, this information, which is the imperfections of Facebook, is communicated with a low Reliability, low commitment, low certainty, medium Authority and High Hedging level. This means that the questioners hedged the responsibility of criticising Facebook. That is to say that the questioners have taken responsibility for deducing that Facebook is inferably looking bad.
- Hearsay expressions are used as evidence on the involvement of Facebook in the use of users' data. These expressions signify that the set of evidence used are purely based on hearsay, senators' statements and media reports.

Unlike the questioners, the committee members have based their statements on Hearsay, Thought, Shared-knowledge and Deduction as a source of knowledge, as seen in the figure above. Committee Members' source of knowledge generally reveals a low to medium

reliability, low to medium commitment, and a high to medium hedging, medium to low authority over knowledge and a medium certainty.

Table 4.59: Evidential Expressions' Implication and Conveyed Attitude by the Committee Members

Interlocutors choice		Lexical choice	Function of the evidential expression	
Speaker/Writer	Hearer/Reader	Evidential source	Function of the proposition in the context/ implication	Epistemic evaluation
Committee members	the witness/people	Thought	The expressions of thought share about the unfamiliarity of committee members with the set of issues and problems to be solved. These expressions are also used to praise the interference of Facebook in the election which is contradictory to what the congress is trying to treat.	Reliability: L Commitment: M Credibility: Hedging: M Authority: M Certainty: M
		Conviction	The expressions of conviction share the belief in the good intentions and capacities of the company. These expressions share also the belief in the company's commitment towards the Americans.	Reliability: H Commitment: H Credibility:/ Hedging: L Authority: H Certainty: H
		knowledge	The expressions of Knowledge are used to transmitted their realisation about the situation and witness's uncomfoting position, and knowledge about Facebook functioning process.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
		Shared-knowledge	Shared-knowledge expressions are expressed about the positives of Facebook and its imperfections, knowledge about the law impact and worries about the future. These expressions are expressed to share with the witness and the whole world their awareness about the imperfections of Facebook as a platform and company, and also CEO's imperfect steps and decisions.	Reliability: M Commitment: L Credibility: / Hedging: H Authority: L Certainty: H/M

	Comprehension	Comprehension expressions are indicating knowledge and awareness about mostly Facebook working process.	Reliability: L Commitment: M Credibility: / Hedging: H Authority: M Certainty: M
	Induction	induction expressions have been used by the committee members to reflect the real situation throughout analytical thinking of the mistakes done by the company.	Reliability: M Commitment: M Credibility: / Hedging: M Authority: H Certainty: M
	Deduction	Some expressions indicate disagreement with the point discussed regarding European Law adoption or adaptation, whereas others expressions are utilised with the insinuation of threat.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: M Certainty: L
	Visual	Visual sensory expressions are expressed to share about positive experiences like gathering the world on an app, and negative experiences like the recruitment of women from all over the world in the service of terrorists.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
	Auditory	Auditory expressions reflect a nuance of flattery and speaker's unwilling to be rude to the witness.	Reliability: M Commitment: M Credibility: / Hedging: M Authority: M Certainty: : M
	Hearsay	Hearsay expressions are used to reflect the situation by citing some allegations and some personas statements.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: L Certainty: /

In a similar way to the previous discussion of the questioners, and regarding the table above, the use of evidentials types is discussed relatively to the situational context and interlocutor(s)'s profile(s), in the following:

- The expressions of Thought share about the unfamiliarity of committee members with the set of issues and problems to be solved. In other words, the main issues debated in the hearings are communicated through Thought expressions, which designates the lack of familiarity with the problematic situation. Furthermore, these expressions are used to praise

the interference of Facebook in the election, which is contradictory to what the congress was trying to treat.

- The expressions of Conviction reflect the belief in the good intentions and capacities of the company. The committee members chose to use the belief in the expression of confidence in the company because of its transmission of high Reliability, Commitment, Authority, and Certainty to the hearer. This act of belief is a kind of flattery or an attempt to make the witness feel supported and understood by the members. Also, the committee communicated belief in the company's commitment towards Americans. This expression by a congress member reflects an act of racism or inclination towards Americans. Although, the issue of racism on the platform and by the staff was repeatedly addressed by committee members. It was revealed that the company had an inclination when recruiting, and that the board of directors was not accessible to Africans. Besides, some of the platform's services are available to users depending on the geographical location; i.e. some countries have more advantages on Facebook app than others.
- The expressions of Knowledge are used to transmit the committee members' realisation of the situation and witness's uncomfortable position, and knowledge about Facebook's functioning process. The communication of the witness's uncomfortable position and tiring hearing is used to share comprehensiveness from the part of the committee members. However, the expressions of awareness of the situation and knowledge about Facebook's functioning process reveal insufficient knowledge of the issue and the platform. Furthermore, some senators declared the non-use of Facebook, whereas others avowed their narrow competence within technology.
- Shared-knowledge expressions are used to share the advantages and disadvantages of Facebook as known all over the world. The committee members hedged the responsibility towards these expressions. In addition, some expressions of shared-knowledge dealt with media companies' regulatory law adoption and worries about the future. This is to say that the speakers hedged the responsibility of communicating their skepticism about law adoption, or that they were simply expressing solidarity with the witness, since the law would undoubtedly narrow his company's activities.
- Comprehension expressions are used to express knowledge and awareness of most of Facebook's working process that is not explained by the staff (witness or others).
- Induction expressions are used by the committee members to reform the real situation through analytical thinking of the mistakes made by the company. This is to say that the committee members have inferred the implications of Facebook, and that this information

is followed by a medium level of Reliability, Commitment, Certainty and Hedging. Moreover, regarding European Law adoption or adaptation, committee members expressed doubt about the effectiveness of these laws as Induction expressions. Also, these expressions are used to express insinuations of threat. The threat or danger is expressed as an inferred knowledge to hedge the responsibility of the informations hared.

- Visual sensory expressions are expressed to share experiences. Some visual expressions are used with the aim of praising the platform's significant role in people's daily lives, and dispraising the platform's low security precautions that has caused the implication of Facebook in very critical problems like the recruitment of women from all over the world in the service of terrorists.
- Auditory expressions reflect a nuance of flattery and the speaker's unwilling to be rude towards the witness.
- Hearsay expressions are used to reflect the situation by citing some allegations and some personas statements. This is to say that Hearsay expressions are used as main evidence on the implication of Facebook in the data privacy breach and foreign interference in elections.

In the following section, the discussion of the use of evidentials by Facebook Team and the Witness are developed.

4.2.2.4.2 Evidentiality use by Facebook Team and Witness. The chart below shows the amount of use of evidentials by the same party (interviewees) but with different personas and in different genres (written and spoken). The results are interesting and different from the previous section in terms of the quantity of evidentials. Similarly, the variation must be significant regarding the genre's characteristics, the speakers' (or writers') goals. However, it must also be considered that a group's discourse is less focussed than a person's discourse is. Still, the global goal of the interviewees is to defend Facebook as a platform, company and personnel.

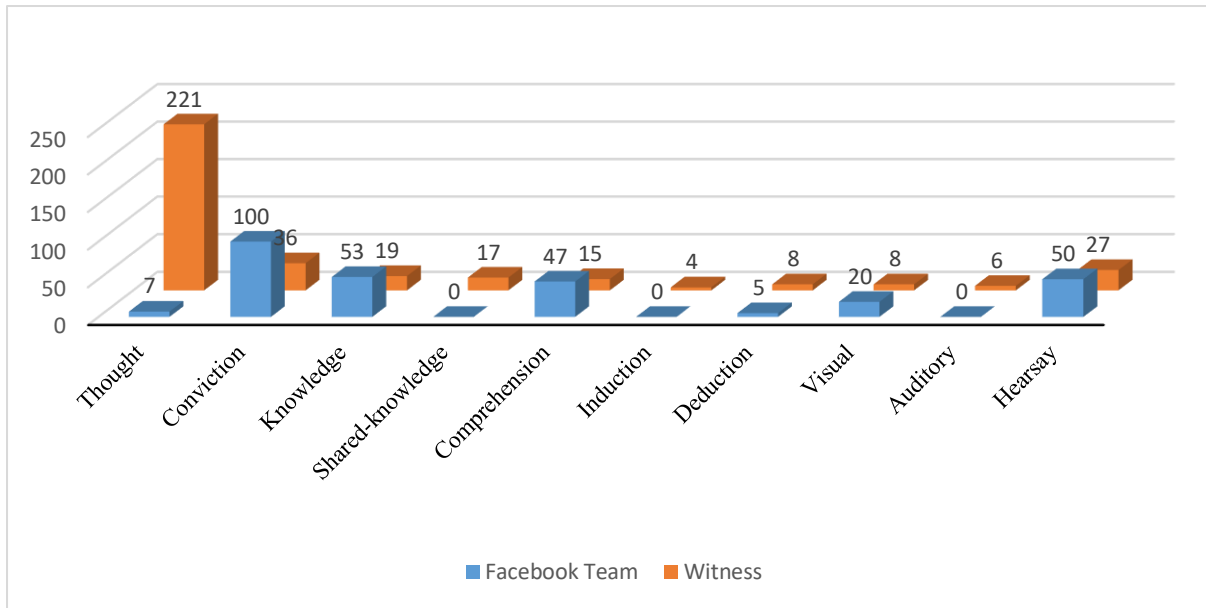


Figure 4.14: Frequency of Evidential Expressions used by Facebook Team and the Witness

The figure above shows that Facebook Team based their statements on Conviction, knowledge, hearsay and comprehension as sources of knowledge. Facebook Team’s source of knowledge generally communicated a low to high reliability, low to high commitment, and a high to low hedging, high to low authority over knowledge and medium to high certainty.

Table 4.60: Evidential Expressions’ Implication and Conveyed Degree of Epistemic Attitude by Facebook Team

Interlocutors choice		Lexical choice	Function of the evidential expression	
Speaker/writer	Hearer/Reader	Evidential source	Function of the proposition in the context/ Implication	Epistemic evaluation
Facebook Team	The question senders/ people	Thought	Thought expressions show no respect to all that was said by congress. These expressions provide the team’s complete negligence of their clients’ willingness to privacy and wellbeing.	Reliability: L Commitment: M Credibility: Hedging: M Authority: M Certainty: M
		Conviction	Conviction expressions share the belief in the importance of people’s awareness of data control, and the principles of their company and in the benefits of AI tools in developing the safety of technology.	Reliability: H Commitment: H Credibility:/ Hedging: L Authority: H Certainty: H

		knowledge	Knowing expressions are used to talk about Facebook staff competence, in addition to electoral issues and foreign interferences to indicate comprehensiveness and control over the situation at the time of speaking.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
		Shared-knowledge		
		Comprehension	Comprehension expressions are used to reflect the realisation of the situation and recognition of regrets and self-blame.	Reliability: L Commitment: M Credibility: / Hedging: H Authority: M Certainty: M
		Induction		
		Deduction	Deduction expressions are used to express uncertainty about some responses.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: M Certainty: L
		Visual	Visual expressions are used to recall about incidents where Facebook has ethically and correctly reacted.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
		Auditory		
		Hearsay	Hearsay expressions are utilised as evidences on the company's partial innocence and its good-intentions. The sources of hearsay used by the Team are the Guardian press and some members from the opponents'.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: L Certainty: /

Regarding the table above, the use of evidentials types is relatively to the context and interlocutors discussed in the following:

- Thought expressions show the Team's lack of respect for all that was said by the congress. In the sense that the Team shows complete negligence of their clients' willingness for privacy and wellbeing. It means that the points that were repeatedly discussed as critical by congress, like ads, were not put into reconsideration, instead the team insisted on their (ads') importance and effectiveness.

- Conviction expressions share the belief in the importance of people's awareness about data control. These expressions reflect the Team's belief in people's implications in the breach of their privacy, which is a kind of blame that falls upon the users. It also reflects the users' underestimation by Facebook or the complexity of the data control settings.

In addition, other expressions of belief reflect the belief in the principles of the company and in the benefits of AI tools in developing the safety of social media. The team insisted on the principles of the company, which is to connect the world together. However, the company declared the incapacity to pursue this goal with no use of ads that is the financial support of the company. This means that the use of the platform is conditional by ads appearance.

- Knowing expressions are used to talk about Facebook staff's competence. That is to say that the team have no doubt about the way Facebook is being run. These expressions are also used to share electoral issues and foreign interference to indicate awareness and control over the situation.
- Comprehension expressions are used to reflect the realisation of the situation and recognition of regrets and self-blame. These expressions reflect the speakers' good intentions and empathy, in addition to the feeling of responsibility.
- Deduction expressions are used to express uncertainty about some responses. This is to say that some answers were communicated with a low Reliability, low Commitment, high Hedging level and an allegedly medium Authority over knowledge, and low Certainty.
- Visual expressions are used to recall about incidents where Facebook has ethically and correctly reacted. The case of visual experience was related by the Facebook team to this incident to reflect a kind of high Reliability, Commitment, Authority, Certainty, and a low Hedging.
- Hearsay expressions are utilised as evidence of the company's partial innocence and its good-intentions. The team furnished through hearsay expressions evidence on the partial, undeliberate and unconscious implication of the company with the incidents. Despite the low Reliability, Commitment and Authority over knowledge accredited to such evidential type, the strength and truthfulness of these expressions laid on the reported sources' credibility. Yet, the used sources are mostly the Guardian press and some members from the opponents' part, who are trust-worthy sources.

Differently from the Facebook Team, the Witness has based his statements on Thought, Conviction and Hearsay as sources of knowledge. The witness's sources of knowledge

communicate a low to high reliability, low to high commitment, and a high to low hedging, high to low authority over knowledge and a medium to high certainty.

Table 4.61: *Evidential Expressions' Implication and Conveyed Degree of Epistemic Evaluation by the Witness*

Interlocutors choice		Lexical choice	Function of the evidential expression	
Speaker/ writer	Hearer/ Reader	Evidential source	Function of the proposition in the context/ implication	Epistemic evaluation
The witness	Committee members/ people	Thought	Thought expressions are used in the expression of the CEO's thought about his company that he sees (or pretends) that it is safe, innocent and legally regulated. Thought expressions are also uttered to state that the mistakes that Facebook's staff committed are a consequence of their trust in the other (bad) platform.	Reliability: L Commitment: M Credibility: / Hedging: M Authority: M Certainty: M
		conviction	Conviction expressions are used to converse about the users' data processing and control, on clarity and good intentions of the company about the ethical use of data.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
		knowledge	Knowing expressions are narrowed to the company's good intentions and awareness of required actions to do, in the aim of reflecting control over the situation.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
		Shared-knowledge	Shared-knowledge expressions are used to express common information.	Reliability: M Commitment: L Credibility: / Hedging: H Authority: L Certainty: H/M
		Comprehension	Comprehension expressions are used with the aim of expressing uncertainty about specific points.	Reliability: L Commitment: M Credibility: / Hedging: H Authority: M Certainty: M

	Induction	The witness uttered the induction expressions as self-blame and doubting misunderstandings with the policy of Facebook.	Reliability: M Commitment: M Credibility: / Hedging: M Authority: H Certainty: M
	Deduction	Deduction expressions are used to denoted incertitude and self-blame.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: M Certainty: L
	Visual	Visual expressions are used to refer to strategic movements of Facebook, that aim to show good action and benefits of the platform. This type of evidentials is, furthermore, used to share a vision of the reality (according to the witness) that people misunderstand.	Reliability: H Commitment: H Credibility: / Hedging: L Authority: H Certainty: H
	Auditory	Auditory expressions are used to reflect the witness's comprehensiveness, and to explain a situation that was differently perceived from how it could/should be seen.	Reliability: M Commitment: M Credibility: / Hedging: M Authority: M Certainty: : M
	Hearsay	Hearsay expressions are used to state opponents' declarations, in addition to Facebook policy terms with the aim of defending the company.	Reliability: L Commitment: L Credibility: / Hedging: H Authority: L Certainty: /

Regarding the table above, the use of evidentials types is relatively to the context and interlocutor discussed in the following:

- The huge amount of thought expressions is devoted to share the witness's Thought in safety of the company, and that it has had no bad intentions and is legally regulated. The witness expressed what is normally to be 'knowledge' or 'belief' in the safety and regularity of Facebook as thought. This is to say that the witness shared these pieces of information with a very modest level of commitment, authority over knowledge, certainty, Reliability, and a medium level of hedging.

Interestingly, with regards to the speaker's (Witness's) position at the company that is Chief Executive and Operator, owner and founder, the high use of thought in the responses given indicated that: The CEO is being less informative, which means he was not cooperative. In

the sense that he tried to communicate as much as few information as possible for his deep belief in the culpability and misconduct of his company that would lead him and the company to regrettable consequences. Or, he is being truthful and he has no information about the incidents, which means that he is just a face of this platform and has no authority over it, and he is being taught what to say and follow up with the team if required.

These expressions of thought also raised the mistakes committed by Facebook that are issues of trust in the others (mainly Cambridge Analytica and Dr. Kogan) as stated by the witness. Furthermore, these expressions reflected the uncertainty of the CEO about the reasons that have led to such critical issues, and, the belief of the CEO in the implication of Facebook and other parties in breaching users' privacy.

- Conviction expressions are used to converse about the users' data processing and control, on the clarity and good intentions of the company, and about the ethical use of data. These expressions reflect the belief of the witness in the clarity and good intentions of his company. However, these expressions also revealed the awareness of the CEO about the use and stocking of users' data for, allegedly, advertising only. In addition, the witness communicated his belief in the legitimacy of data use regarding the consent agreed on by the users, and the lack of competence of users in data control settings.

Since the talk is about 'privacy' and 'data control', it is worth noting that these two key concepts' use by interlocutors was not equivalent. The CEO and Facebook team used 'privacy' as a signification to 'only friends can see the information concerning the profile and the wall of Facebook', whereas the 'data control' indicates 'the regulation of settings that the user could regulate to allow users and friends to see the shared information on the wall'. Unlike, the congress and the questioners' used the term 'privacy' to refer to 'the incapacity to access users' information or private messages and wall's content by the company and others, unless the content or messages are detected as unsafe by other users or any detecting program'; and, the expression 'data control' is used to signify 'the control over ownership of the information by the user, and user only, with no further use of the data by any party. This case of misuse of concepts, as mentioned in chapter two, is referred to by Allott (2005) as the code-word model, as 'slippage' between expert and non-expert perception of these concepts where the expert is aware of this distinction ('anomaly'). This misuse of the concept, as mentioned by Allot (2005), is fuzziness causing tool in the aim of misleading the addressees. In other words, the misuse of these key concepts leads the committee members to interpretative problems, as discussed by Saussure (2005).

- Knowing evidential expressions are narrowed to the company's good intentions and awareness about required actions to do by reflecting control over the situation. These expressions, as one of the most reliable evidential expressions are used to talk about futuristic plans and the company's intentions.
- Shared-knowledge expressions are simply used to express common information or the known issues and problems that face the company.
- Comprehension expressions are used with the aim of expressing uncertainty about specific points.
- Induction expressions are utilised by the witness to express self-blame. These expressions are also communicating doubts about the issue with Facebook policy. This is to say that self-blame and doubt are inferred by the witness, and he allegedly had no prior knowledge about the issue of length and complexity of the consent policy.
- Deduction expressions are used to denoted incertitude in responses, self-blame and doubting misunderstandings of the Facebook policy.
- The visual expressions are used to communicate an event or an experience. The witness strategically opted for the reference to the ME TOO movement with the aim of showing good action and benefits of the platform, as a recall for the hearers. Some expressions reflect past actions that Facebook has heroically and secretly faced. These expressions are communicated by the witness to share a vision of the reality that people are misunderstanding. These visions and events are expressed as visual expressions for its high reliability and commitment levels.
- Auditory expressions are used to express the witness's comprehensiveness, and to explain a situation that was seen differently from how it could/should be seen by people. These expressions are utilized to confirm and correct pieces of information.
- Hearsay expressions are used to state opponents' declarations, in addition to their policy terms in the aim of defending the company. These expressions are the most important evidence on the implication of third parties within the deception of Facebook and data abuse.

The set of interpretations of the main aims for the use of the evidential expressions and their implications are discussed and, furthermore, explained in the following section.

4.2 Discussions

The main interest of this research is the localization of the implications or the role of both Affect and Evidential markers in the manipulative strategy. In other words, the way these two linguistic aspects contribute to manipulation. Hence, in this research, affect and evidential expressions are approached to be implicated with manipulation in legal discourse. This is to say that affect expressions are hypothesised to be related to the emotional manipulation, which is denoted as the psychological mechanism of manipulation. Unlike, evidential expressions are seen as implicated with the cognitive and social mechanisms in addition to the linguistic ones.

The discussions of the implications of those aspects in the manipulative strategy are firstly presented in the form of tables regarding manipulative mechanisms and then discussed. The first aspect that is discussed is Affect implication with manipulation.

4.2.1 The Discussion of Affect Expressions’ Implication within Manipulation

The discussion of affect expressions’ implication within manipulative mechanisms is exposed in the table below.

Table 4.62: Affect Expressions’ Implication within Manipulative Mechanisms

Manipulation mechanisms	Question askers	Congress members	Facebook Team	Witness
Social	Social issues: Racism	Social issues: Racism	Social issues: /	Social issues: /
	-Social position: /	-Social position: /	-Social position: /	-Social position: People’s inferiority (ignorance)
Psychological	Self-representation through Affect: Positive: -Being good -Grateful Comprehensive -Polite -Critical -Straight -Belief in Truthfulness -Anti-discrimination	Self-representation through Affect: Positive: -Being good -Grateful -Comprehensive -Polite -Critical -Straight -Belief in Truthfulness -Anti-discrimination	Self-representation through Affect: Positive: -Politeness -Noble intentions and future safe plans -Comprehensive -Feeling of responsibility for the content share -Regrets -Discomfort -Dissatisfied	Self-representation through Affect: Positive: -Politeness -Noble intentions and future safe plans -Comprehensive -Feeling of responsibility for the content share -Regrets -Discomfort -Dissatisfied

	<p>-Belief in importance of privacy</p> <p>Negative:</p> <p>others-representation through Affect: Positive:</p> <p>Negative:</p> <p>-Other parties as bad.</p> <p>-Facebook's bad deeds.</p> <p>-Facebook team as racist.</p> <p>-Facebook team as untruthful with their clients</p>	<p>-Belief in importance of privacy</p> <p>-Worried</p> <p>-Cooperative</p> <p>-Supportive</p> <p>-Trust-worthy</p> <p>Negative:</p> <p>-Implication with people's safety.</p> <p>others-representation through Affect: Positive:</p> <p>-Speaker is admired</p> <p>-Facebook' good intentions and noble principles</p> <p>Negative:</p> <p>-Other parties as bad.</p> <p>-Facebook's bad deeds.</p> <p>-Facebook team as racist.</p> <p>-Facebook team as untruthful with their clients</p>	<p>Negative:</p> <p>others-representation through Affect: Positive:</p> <p>Negative:</p> <p>-Shared Culpability</p>	<p>-Confidence</p> <p>-Pride</p> <p>-Awareness about responsibility</p> <p>Negative:</p> <p>-Confession of negligence</p> <p>others-representation through Affect: Positive:</p> <p>Negative:</p> <p>-Shared Culpability</p> <p>-People's ignorance and foreign actors (enemies' intentions) as reasons of Insecurity.</p> <p>-Others' bad actions</p>
Linguistic	/	/	/	/
Cognitive	-Cognitive esteem: /	-Cognitive esteem: /	Cognitive esteem: /	Cognitive esteem: /

Affect expressions in this corpora are used in sharing a psychological and affectual position. As, the questions' askers in the Letter used affect expressions to reflect a good self-image and their attitude towards the interlocutor(s). This is to say, questioners mostly shared on their perception of the interlocutors or reaction based on Facebook activities, where no personal feelings are shared. However, it is shared that 'others' are negatively presented, where all of other parties' negative implication with the situation, Facebook's bad deeds, acts of

Racism and Untruthfulness with the users are confirmed with evidence. These positive self-representation and negative other-representation are according to van Dijk (2003; 2006) an important insinuation of an act of manipulation. However, this could be sceptically seen in a case where the shared positives and negatives could reflect un/real representations.

Affect expressions in the hearings are used by the committee members to positively represent the self and negatively represent the other. In addition to the feelings shared by these members, personal feelings are also present like worries, being supportive and cooperative with the witness. The worries reflect the members' affectual implication with situation that is also the people's feelings. Whereas the reflected feelings of being supportive and cooperative reflect the members' good intentions towards the witness, which is supposed to make the witness feel backed up. This later could fall under manipulative aims.

Furthermore, the committee members expressed negative self-implications towards the safety of people. And yet, this is a kind of shared position and culpability with the witness that Saussure (2005) sees as a manipulative strategy which is based on the creation of a shared atmosphere. Moreover, the committee members also expressed a positive perception of the others (Facebook and the witness) when they expressed their belief in the noble principles of the platform, and their admiration of the witness as a person and businessman.

Also, the Facebook team in the Letter used the affect expressions to reflect a good self-image. This is to say, the team shared mostly the feelings of regret, discomfort and culpability towards the situation. This is to say that the Facebook team basically tried to bleach Facebook's image. This image bleaching can fall under the previously discussed cases of falsity and truthfulness of belief, according to Saussure (2005). This means, if the Facebook team really believes in the positive image of Facebook, thus, the act is persuasive regarding the interlocutors' intentions. However, if the positive image is believed false and communicated as true, so Facebook team is dishonest and manipulative.

Likewise, the witness in the hearings expressed the same positive feelings about Facebook and he added expressions of awareness about responsibility, confession of negligence, confidence and pride. The witness shared a considerable number of positive affect markers to positively reflect self-image. Besides, he shared negative others-representation. He also insisted on the shared culpability throughout the implication of people with the insecurity because of their ignorance, as well as foreign actors' interference and others' bad actions. In addition to what is observed in the responses of the Team in the Letter, the witness opted for bleaching the image

of Facebook using more affective expressions. Thus, the witness is being honest if the feelings are real, or he is being manipulative if the feelings are not real (i.e. deceptive).

It is worth noting that the witness repeatedly referred to the ignorance or the modest capacities of people to regulate data control settings, which is a kind of underestimation of others and self-supremacy.

To wrap up, affect markers are implicated with the psychological mechanism of manipulation. Each of the four interlocutors claim(s) to have good intentions where the others are being bad. Yet, the Committee Members opted for the creation of a shared sphere with the witness. Whereas, the Facebook team and the witness opted for Facebook's image bleaching.

Furthermore, other remarks on the use of affect are noted. This research clarifies a set of points concerning affect use and analysis. The first point, the positivity and negativity of affect markers use does not reflect the positivity and negativity of the affect expression. Consider these examples starting by the witness's statement:

We already use artificial intelligence to help us identify threats of real world harm from terrorists and others

This expression regarding the context denotes the positivity and well-being of the speaker despite the use of two negative markers 'threats' and 'harm', regarding Biber and Finegan's (1989) taxonomy. In a similar vision, considered the following examples (a senator's statement):

I appreciate that you have apologized for it

In this example, a negative affect marker 'apologized' is preceded by a positive one 'appreciate'. This case reflects both speaker and hearer's affectual situation, that is the speaker's satisfaction with the hearer's feeling of culpability. Also consider this senator's statement:

somebody asked you earlier if it made you mad about what Cambridge Analytica did, and you rightfully answered yes

In this example, the confirmation of the witness on being 'mad' with Cambridge Analytica reflects a good image of the witness. Thus, despite that the expression carries a negative affect marker, the whole affect expression indicates a positive connotation. Expressed differently, a

statement as an affect expression may mirror a different/opposite connotation from the category to which the affect marker used in the statement belongs.

This point sheds light on the use of automatic annotation of affect markers (like Biber and Finegan's 1989 taxonomy) using computational tools (like: Antconc) in the reflection of the self/other representation is not fruitful and it might be misleading.

The second point, affect expressions reflect speakers' beliefs. The belief can be shared throughout affect expressions. Consider the following excerpts from the corpora (senators' statements):

Unfortunately, in a recent lawsuit, as of February 2018, alleges that discriminatory ads were still being created on Facebook, still disproportionately impacting low-income communities and communities of color

Something's very disturbing to me, is the fact that there have been law enforcement organizations that use Facebook's platform to - to - to surveil African American organizations like Black Lives Matter

These examples reflect the speaker's belief in anti-discrimination in society (belief in equality) shared by the use of 'unfortunately' a negative affect marker according to Biber and Finegan's (1989) list that denotes dissatisfaction.

The third point is built in relation to the previous point 'belief in anti-discrimination'. It has raised another interesting observation, that it is not obvious to detect a manipulative strategy throughout a group's discourse, especially when the group is not concordant and agreed on specific norms, for the simple reason that some contradiction would appear when conversing. Consider the following excerpts from the questioning statements of the hearings:

Unfortunately, in a recent lawsuit, as of February 2018, alleges that discriminatory ads were still being created on Facebook, still disproportionately impacting low-income communities and communities of color

The incident involving Cambridge Analytica and the compromised personal information of approximately 87 million American users -- or mostly American users - is deeply disturbing to this committee

...we know that you should - you're committed towards the Americans...

In these two examples, the first highlights the feeling of dissatisfaction with the discrimination, whereas the second speaker reflects discriminatory thinking when he/she specifies the idea of dissatisfaction with the committee because of the implication of Americans within this issue

(regardless of other nationalities). Yet, the third example reflects the same belief in inclination towards Americans.

Fourth, and last point, affect expressions generally contribute to the manipulative act, especially when the manipulator(s) seek(s) an evaluative and emotional reaction.

From a similar analytical perspective, Evidential expressions' implication with manipulation mechanisms is considered in the following subsection.

4.2.2 The Discussion of Evidential Expressions' Implication within Manipulation

The second aspect that is discussed is Evidential expressions' implication with manipulation.

Table 4.63: Evidential Expressions' Implication within Manipulative Mechanisms

Manipulation mechanisms	Question askers	Congress members	Facebook Team	Witness
Social	<p>Social issues: -Racism issues related to Facebook.</p>	<p>Social issues: -Racism issues related to Facebook and the congress member. -Facebook in the service of hiring women by terrorists.</p>	<p>Social issues -Legitimate activities of Facebook. -Negligence of users' willing concerning privacy and Ads. -Conditional use of Facebook related to ads appearance.</p>	<p>Social issues: -Legitimate use of Data. -Belief in good intentions of Facebook. -Facebook implication because of others. -stating Good actions of Facebook. -Representation of reality.</p>
	<p>-Social position: low: -They did not dare to criticise Facebook. -To need for security and AI assistance.</p>	<p>-Social position: low: -Hedging the responsibility of declaring the negatives and positives of Facebook.</p>	<p>-Social position: High: -Users' knowledge underestimation.</p>	<p>-Social position:</p>

	-Non-expert: narrow knowledge.			
Psychological		-Praising the witness/ make the witness feels supported and understood. -Awareness about the uncomfortable situation of the witness. -Solidarity with the witness for law adaptation. -Politeness. -Praising and dispraising Facebook.	- Comprehensiveness	
Linguistic	-Hearsay evidentials use as main evidence.	-Hearsay evidentials use as main evidence.	-Hearsay evidentials use as main evidence. -The misuse of concepts: 'Data control' and 'privacy' -uncertainty about some responses.	-Thought evidentials high use. -Hearsay evidentials use as main evidence from opponents' declarations and certifications. -Being less informative (breach of qualitative and quantitative maxims). -The misuse of concepts: 'Data

				control' and 'privacy'. - misrepresentation of reality -uncertainty about some responses.
Cognitive	-Cognitive esteem: -Speakers' modest knowledge about the discussed topic.	-Cognitive esteem: -Unfamiliarity with the critical situation. -Insufficient knowledge about the Facebook Data processing. -The witness's high cognitive esteem by the members.	Cognitive esteem: -People poor knowledge about Data control. -Facebook stuff undoubted competence.	Cognitive esteem: -People poor knowledge about Data control.

It is revealed that evidential expressions are implicated with transferring information/attitude related to manipulation mechanisms. In the following, each of the speakers (groups and individual)'s use of evidential expressions is/are reviewed.

The questioners communicated racism issues related to Facebook. These social issues related to a Tech company would completely destroy the company's image. However, they shared a low social position that appeared when they did not dare criticise Facebook only by using inferential evidentials. They also expressed the need for security and AI assistance that Facebook is normally providing. Furthermore, they reflect narrow knowledge about the issues discussed, so they are seen as non-expert and thus, a low cognitive esteem. Yet, Hearsay expressions were communicated as main source of knowledge. Consequently, the questioners as a group had no clear manipulative strategy. Simply put, according to the communicated low social position and narrow knowledge about the topic, the questioners do not reflect a profile of a manipulator.

The committee members choose very sensitive social and political issues in their questioning statements. Some of these issues were communicated using evidentials to reflect a kind of epistemic value such as the social issue of Racism that is related to some actions taken

by Facebook, and the implication with terrorism in Facebook's use in the service of hiring women by terrorists. These issues are used by the committee members to culpabilize the witness, weaken him and expose a bad image of Facebook. Furthermore, committee members communicated a low social position because they hedged the responsibility of stating the negatives of Facebook. They also communicated the belief in the witness's high cognitive esteem and their low cognitive esteem. This divergence in cognitive esteem is significant in manipulation. However, the confession of the supremacy of the witness by the committee members is a kind of flattery, that is as stated by Akopova (2013, p.81) as an effective method to cause manipulation. Besides, the witness was praised and supported by the committee members. They also shared with the witness the awareness of the uncomfortable situation and their solidarity with him concerning the adoption of law regulations. This strategic use of evidentials reflects what Akopova (2013, p. 81) called "Productive manipulation", which is identified as the manipulator's recognition as a 'voluntary donor', which means that the speakers (committee members) situate the listener (witness) in the position of superiority and social welfare.

The Facebook Team pointed out the legitimacy of the activities of Facebook. However, they insisted on the relevance and efficiency of the advertisements Facebook shows by implying the negligence of users' willingness concerning privacy and ads. Furthermore, they insinuate that the conditional free use of Facebook is related to ads' appearance. This is to say that the Facebook team had no doubt about their mode of business and had no intention of reconsidering their business, which is a sign of strength and confidence. Furthermore, the team expressed a high social position and underestimated the users' knowledge (people's poor knowledge about data settings control). Whereas, they shared about the personnel's undoubted competence in the domain. Moreover, the team expressed comprehensiveness of the worries and dissatisfaction of the committee and users, which is concerned as a psychological factor. In addition, the Facebook team misused the expressions 'data control' and 'privacy', and expressed uncertainty about responses, which are tools to create fuzziness and misunderstanding. So, the team members reflected themselves as confident, strong and experts, and caused misunderstanding. This strategy reflects the generation of mind blocking that is recognised as a manipulative strategy by Saussure (2005).

The witness insisted on the legitimate use of data and Facebook's implication in these difficulties because of the interference of others (Cambridge Analytica, Dr. Kogan and foreigners' interference). Besides, he repeatedly expressed the belief in the good intentions of

Facebook and stated the good actions Facebook has taken. He also asserted that people misunderstood the fact that Facebook has never focused on users' Data, used users' Data or sold users' Data. However, Facebook repeatedly asked for users' data and used users' data to show relevant ads and sold users' links to ads companies regarding their needed potential customers' profiles for their services or products. This is to say that the witness told the version from the suitable angle and used the suitable words to deceive the committee members, especially because they could barely make the distinction between what the witness said and what he could say, i.e.: they (majority of committee members) could barely distinguish between the chosen meaning and the potential meanings since their knowledge about the technology are narrow. Thus, this act of misrepresentation of reality and violation of Quality maxim and Quantity maxims with the aim of causing a shift in the perception of these members is an act of manipulation.

In addition, the witness believed in supremacy (higher cognitive esteem) regarding the/some interlocutors and people's poor knowledge about the domain. However, the evidential expressions' investigation showed the witness's high use of thought as evidence in his testimony as well as hearsay expressions that were based on the other parties' (opponents') declarations and certifications. Regarding the witness's position and knowledge about the domain, the use of thought and hearsay as source based modes of knowing is an act of misinformation and violation of Maxims. Still, the witness believed in supremacy (higher cognitive esteem) regarding the/some interlocutors and people's poor knowledge about the domain. As a result, the evidentials use reflects the witness as being less informative and deceptive. He has perfectly intended to breach conversational maxims, in addition to the misuse of concepts: 'data control' and 'privacy', and uncertainty about the majority of responses. This means that the witness's use of evidentials reflects an act of manipulation.

Regarding the discussions above, the manipulative procedure and manipulation type are selected in the following sub-section.

4.2.3 The Manipulative Procedure used by the Interlocutor(s)

The manipulative procedure highlighted and discussed in chapter two was determined in regards to the discussions of the results as shown in the table below.

Table 4.64: Manipulative Strategy

The manipulative procedure	Questioners	Committee members	Facebook Team	The Witness
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1- Communicative goals (speaker's goals).	Defend users privacy and investigate the truth (allegedly or not).	Defend users privacy and investigate the truth (allegedly or not).	Bleach Facebook image and clarify (allegedly or not) the situation.	Bleach Facebook image and clarify (allegedly or not) the situation.
2- Cognitive esteem of the manipulated	Speaker(s): low Hearer(s): high	Speaker(s): low Hearer(s): high	Speaker(s): high Hearer(s): low	Speaker: high Hearer(s): Low
3- The strategy to communicate the manipulative discourse (social and psychological)	Social position: inferior Psychological status: /	Social position: inferior Psychological status: -Cooperative -Supportive -Admirer of the witness -Implicated with people's safety.	Social position: superior Psychological status: -Penitent	Social position: superior Psychological status: -Confident -Proud -Penitent
4- The discourse with manipulative context	Linguistic manipulation:	Linguistic manipulation:	Linguistic manipulation: -Misuse of concepts	Linguistic manipulation: -Misuse of concepts - Misrepresentation of reality.
5- The belief in unity, super/under competence, shared destiny/interests and/or speaker's altruism (blocking the hearers' mind)		- Belief in the company's principles - Shared implication with people's safety. (Shared sphere)	They tended to block the hearers' mind through the misused concepts.	He tended to block the hearers' mind through the misused concepts and the misrepresentation of reality.

Regarding this table, it is possible to deduce that the questioners does not reflect the profile of a manipulative interlocutor. In Contrast, the committee members are deemed to be unsuccessfully manipulative and/or the intention of manipulation due to the shared sphere, cooperativeness and belief in the company's principles; this intention can also be the results of the mixed interactions of interlocutors (group's speech). Differently, the Facebook Team and the witness are deemed to reflect a profile of a manipulative interlocutor(s).

The situation discussed above of the manipulateness in the discourse of Committee members, the Facebook Team and the witness, on the one hand, revealed that the Facebook team and the witness used the same manipulative strategy to bleach the image of Facebook.

Furthermore, the witness communicated responses where he misused key concepts in the hearing that caused understanding issues. He also misrepresented reality when conversing about the intentions and principles that mismatch with the reality. Thus, the responses communicated would represent an act of lying if he communicated the responses as true where he knew that they were false (as stated in chapter two); or, if he believed in the truth of the responses where the responses mismatch with the reality, which calls for a case of second-hand/unintentional/indirect manipulation. However, regarding the witness’s communicative goals and Saussure’s (2005) refusal of total unawareness about the falsity of the communicated knowledge, or at least suspicion, the witness’s responses remain manipulative. On the other hand, the committee members worked on constructing a good image of themselves and a shared sphere with the interlocutor. It is also discovered that the committee members and the questioners were remarkably more cooperative and tolerant than they should be in such cases of privacy and security breaches.

Further perceptions about the nature (reality/objectives/intentions) of the interlocutor(s) are exposed in the subsection entitled ‘the practical contribution of the research’. This subsection is a part of the next section that consists also of the linguistic and pedagogical contributions. The following section deals with the type(s) of manipulation used regarding the theoretical research conducted in chapter two.

4.2.4 Manipulation Types used by the Interlocutor(s)

The types of manipulation used by the interlocutor(s) in the corpora are reconsidered regarding the types of manipulation listed in Chapter Two according to Akopova (2013) and Barnhill (2014). Consider the table below.

Table 4.65: Manipulation Types used by the Interlocutors in this Corpora

Manipulation differentiation according to the character	Questioners	Committee members	Facebook Team	The Witness
Subject-object interaction	/	direct	Indirect and direct	Indirect and direct
Awareness of manipulative linguistic action (intentionality)	/	intentional	intentional	intentional

Manipulator's orientation	/	Person-and Society-oriented manipulation	Society-oriented manipulation	Society-oriented manipulation
Manipulated (person/group) responsive reaction	/	Evaluative and responsive reaction	Rational reaction	Rational reaction
communicative skill in language usage	/	productive manipulation	Actualizing communication	Actualizing communication

This means that the interlocutors have used, according to the tables above, different types and strategies. The question askers of the Letter had no manipulative strategy. However, the Committee members used intentional direct manipulation to the hearer(s). This manipulation is built upon productive communicative skills (inferiority) to get an evaluative and responsive reaction. However, it was not clear if the Committee members tended to person-oriented or society-oriented manipulation. Still, if the committee members used person-oriented manipulation, this act of manipulation would be acceptable ((un)ethical depending on the congress's rules) to get information from the witness. Whereas, if the committee members used society-oriented manipulation, this means that the committee members would be working on misleading public opinion. Yet, regarding the use of productive communicative skills, the committee members (some of them) mostly tended to mislead public opinion. It is also acceptable to understand that the committee members tried to manipulate both witness and public opinion. However, the Facebook team and the witness used intentional, direct and indirect society-oriented manipulation throughout actualizing communicative skills to get a rational reaction.

As a conclusion to this point, the manipulative act that occurred at the hearings was successful. The witness discourse perfectly reflected the manipulative act using the mind blocking throughout the misrepresentation of reality and misuse of concepts. Whereas, the committee members' discourse indecisively reflected the profile of a voluntary manipulated and a manipulator of witness and public opinion.

To conclude, this research gave birth to several significant observations concerning linguistic investigation and the case studied. These observations are listed in the next section as a conclusion to the dissertation. In addition, this conclusive section also includes the contribution of this research.

4.2.5 Research Questions and Hypotheses reconsidered

In this section, the research questions are answered, and the research hypotheses judged confirmed or rejected. In the table underneath, the research questions and their answers are exposed.

Table 4.66: Research Questions' Responses

Research questions	Answers
1. Do affect and evidential markers work for manipulation?	Yes, Affect and Evidential markers, generally, transmit meaning that contributes to the construction of manipulation.
2. How do affect expressions (markers) contribute to the manipulateness of a text?	The speaker's use of Affect expressions reflects speaker's self and others' psychological representation in the discursive event. This is to say that affect expressions contribute to the manipulative strategy through, mainly, the contribution in the psychological mechanism.
3. How do evidential expressions (markers) contribute to the manipulateness of a text?	The speaker's use of Evidential expressions reflects speaker's self and others' cognitive and social representation in the discursive event. This means that evidential expressions contribute to the manipulative strategy through Psychological, Cognitive, and Social mechanisms.
4. In other words, what manipulative mechanisms are stimulated by affect and evidential expressions?	Affect and evidential expressions stimulate Psychological, Cognitive and Social mechanisms, in addition to linguistic ones.
5. Is spoken or written discourse highly to be considered as reliable legal discourse?	The written discourse could be seen as less manipulative than some spoken discourses. Nonetheless, this does not mean that the written discourse could be seen as more reliable than spoken ones, as far as this dissertation shows.
6. Is it possible to investigate specific markers in discourse to determine the speakers' position and knowledge about a specific situation?	As far as literature research is concerned, some of the speakers' position and knowledge could be detected throughout the evidential expressions the speaker communicates. However, speaker's position and knowledge could be also detected without evidential markers in a discourse.

<p>7. Is Chafe's (1989) taxonomy sufficient to be investigated as tracing evidentiality in Legal Discourse?</p>	<p>No, Chafe's (1989) Taxonomy is not sufficient to be investigated in a corpus. Furthermore, any adapted evidential markers' list would undoubtedly miss some evidential expressions.</p>
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The table below shows the research hypotheses and their judgements as confirmed or rejected.

Table 4.6748: Research Hypotheses and Judgements

Research hypotheses	Judgement
<p>1. Affect and evidential markers influence the hearer(s)' perception of the speaker from an emotional and epistemic state. Thus, if these linguistic units are used deceptively, the hearer(s) could be manipulated.</p>	<p>Partially confirmed. Affect and evidential markers are not directly implicated with the manipulateness of a discourse. However, as far as this research is concerned, affect and evidential markers are key concepts of affect and evidential expressions that serve linguistic manipulation.</p>
<p>2. Affect expressions reflect the speaker's emotional state that is communicated in the aim of creating an impression (image) to effect the hearer(s)'s perception.</p>	<p>Confirmed.</p>
<p>3. Evidential expressions reflect the speaker's attitude, commitment, reliability and authority in the aim of showing social power and in the aim of effecting the hearer(s)'s perception.</p>	<p>Partially confirmed. Evidential expressions reflect the speaker's attitude, commitment, reliability and authority in the aim of showing social power. However, the contribution of evidential expressions occurs in manipulative strategy through the Psychological, Cognitive, Social mechanism.</p>
<p>4. Through evidential and Affect expressions' influence on the hearers, a change in the hearers' perceptions is made and this is a manipulative act.</p>	<p>Confirmed.</p>
<p>5. As pointed out in the literature review, the spoken discourse would be manipulative; so, as a legal discourse, the written materiel would be more reliable discourse.</p>	<p>Partially confirmed. The written corpus cannot be determined as highly reliable regarding this research finding.</p>
<p>6. Evidential expressions in discourse would reflect speakers' position and knowledge about a specific situation.</p>	<p>Confirmed. However, apart from evidential expressions,</p>

	other expressions would also imply the speaker(s)'s position and knowledge.
7. Moreover, Chafe's (1989) taxonomy is not sufficient for the investigation of evidential markers in discourse, and even the adaptation of this taxonomy would leave some evidential expressions undetected.	Confirmed.

The questions responded above were investigated in the legal corpora using both qualitative and quantitative methods of analysis. The following section reviews the interaction between these two methods of analysis that are previously defined and explained in the methodological chapter (Chapter Three).

4.2.6 Qualitative and Quantitative interactions

In this research, the quantitative findings strengthened the qualitative ones. The quantitative findings pinpointed the most frequent qualitative features investigated. This is to say that the amount of affect and evidential expressions as investigated features have a significant indication of the emotional state of the speaker and the highly used mode of knowing. Yet, the least used ones were not completely ignored until the quantity is less than three expressions in the whole corpora.

This subsection is a briefing on the way the quantitative and qualitative methods are dependently used in this research, which is the last part of the fourth chapter. Thus, the following section deals with the conclusion of this chapter.

Conclusion

This chapter considered all the results annotated, listed and tabulated by the UMA corpus tool. The annotated expressions were interpreted and analysed regarding the user's needs. This chapter was initiated by a general briefing on the data collected; then tackled through the analysis of the findings gathered on Affect expressions frequency and use. After that, it studied the expressions that refer to evidentiality, in which the five modes of knowing were taken into consideration.

The findings showed, on one hand, a variety in the use of affect expressions, where positive affect expressions represented the majority. Gratitude, satisfaction and positive self-representation expressions were greatly used. However, concerning the negative affect expressions a less important number is generally used. It is revealed that the higher frequencies

refer to dissatisfaction, culpability and insecurity. On the other hand, the results exposed an interesting use of Belief and Hearsay markers, whereas a modest use of both Inference and Sensory was observed. The findings also showed the use of diverse evidentials.

The discussion part of this chapter revealed the implication of affect and evidential expressions within the manipulative strategy. It also deals with the types of manipulation used by the interlocutors in regards to the impact made by the investigated linguistic units (affect and evidentials). Furthermore, as a part of the discussion, the research questions and hypotheses were answered and reconsidered. Finally, the quantitative and qualitative methods' interaction in the analysis is developed, which shows the dependence of these two methodological tools in the analysis of the findings of this research.

Chapter Five: Concluding Chapter

Chapter Five: Concluding Chapter

Introduction

This chapter is the conclusive part of the research. It is composed of five sections: The first section highlights the significance of the findings that recapitulates the implications of affect and evidential markers with manipulation. The second section, namely the synthesis of the main findings, wraps up the main findings and sheds light on the implications and the contributions of this research. In addition, the validation, the limitations, and prospects for future research are presented in the third, fourth, and fifth sections of this chapter, respectively.

5.1 Significance of the Findings

The main thrust of this research has been the anchoring of the implications of both Affect and Evidential markers in the manipulative strategy in legal discourse. This is to say that affect expressions are hypothesised to be related to the emotional manipulation, which is denoted as the psychological mechanism of manipulation. On the other hand, evidential expressions are seen as implicated with the cognitive and social mechanisms in addition to the linguistic ones.

The discussion of affect expressions' implication within manipulative mechanisms (see Table 4.83 above) concluded that affect expressions in this corpus are used in sharing a psychological and affectual position, in view of the fact that the questions' askers in the Letter used affect expressions to reflect a good self-image and their attitude towards the interlocutor(s). Expressed differently, questioners mostly shared their perception of the interlocutors or reaction based on Facebook activities, where no personal feelings are shared. However, by the same token, others are negatively presented, where all of the other parties' negative implication with the situation, Facebook's bad deeds, acts of racism and untruthfulness with the users are confirmed with evidence. It transpires that these positive self-representations and negative other-representations are, according to van Dijk (2003, 2006), an important insinuation of an act of manipulation. However, this could be sceptically seen in a case where the shared positives and negatives could reflect un/real representations.

The study has shown that affect expressions in the hearings are used by the committee members to positively represent the self and negatively represent the other. In addition to the feelings shared by these members, personal feelings are also present, like worries, being supportive and cooperative with the witness. Moreover, it has been shown that the worries reflect the members'

affectual implication with the situation, that is also the people's feelings, while the reflected feelings of being supportive and cooperative reflect the members' good intentions towards the witness, which is supposed to make the witness feel backed up. It is this ploy which could fall under manipulative aims.

Furthermore, as per the above discussion, the committee members arguably expressed negative self-implication with the safety of people. And yet, this is a kind of shared position and culpability with the witness that Saussure (2005) sees as a manipulative strategy which is based on the creation of a shared atmosphere. Moreover, the committee members also expressed the positive perception of the others (Facebook and the witness) when they expressed their belief in the noble principles of the platform and their admiration of the witness as a person and businessman.

It has also been shown that the Facebook team in the Letter used the affect expressions to reflect a good self-image. In other words, the team shared mostly the feelings of regret, discomfort, and culpability towards the situation. Thus, the Facebook team basically tried to bleach Facebook's image. This image bleaching can fall under the previously discussed cases of falsity and truthfulness of Belief, according to Saussure (2005). This amounts to say that, if the Facebook team really believed in the positive image of Facebook, the act would be persuasive regarding the interlocutors' intentions. However, if the positive image was believed to be false and communicated as true, so Facebook team would be dishonest and manipulative.

Likewise, the witness in the hearings expressed the same positive feelings about Facebook, and he added the expressions of awareness about responsibility, confession of negligence, confidence, and pride. The witness shared a considerable amount of positive affect markers to positively reflect self-image, while sharing negative others-representation. He also insisted on the shared culpability throughout the implication of people with the insecurity because of their ignorance, as well as foreign actors' interference and others' bad actions. Further to what is observed in the responses of the Team in the Letter, the witness opted for bleaching the image of Facebook, using more affective expressions. Thus, the witness would be honest if the feelings were real, or he would be manipulative if the feelings were not real (i.e., deceptive). In this respect, it is to be noted that the witness repeatedly referred to the ignorance or the modest capacities of people to regulate data control settings, which is a kind of underestimation of others and self-supremacy.

What emerges from the above discussion is that affect markers are implicated in the psychological mechanism of manipulation. Each of the four interlocutors is claiming to have good intentions, while the others are represented as bad. Yet, the Committee Members opted for the creation of a shared sphere with the witness, whereas the Facebook team and the witness opted for Facebook's image bleaching.

The second aspect that emerges from the research is Evidential expressions' implication with manipulation. As is shown in Table 4.83 above, evidential expressions are implicated with transferring information or attitudes related to manipulation mechanisms. It emerges that the questioners communicated racism issues related to Facebook. These social issues related to a Tech company would completely destroy the company's image. However, they shared a low social position that appeared when they did not dare criticise Facebook, except through the use of inferential evidentials. They also expressed the need for security and AI assistance that Facebook was normally providing. Furthermore, they reflected narrow knowledge about the issues discussed, so they are seen as non-experts and thus hold low cognitive esteem. Yet, Hearsay expressions were communicated as the main source of knowledge. Consequently, the questioners as a group had no clear manipulative strategy. Simply put, according to the communicated low social position and narrow knowledge about the topic, the questioners do not reflect a profile of a manipulator. It has also emerged that the committee members chose very sensitive social and political issues in their questioning statements. The majority, or some of these issues, were communicated using evidentials to reflect a kind of epistemic value, such as the social issue of racism that is related to some actions taken by Facebook, and the implication with terrorism in Facebook's use in the service of hiring women by terrorists. It is interesting to note that these issues are used by the committee members to incriminate the witness, weaken him, and expose a bad image of Facebook. Furthermore, committee members communicated a low social position because they hedged the responsibility of stating the negatives of Facebook. They also communicated their belief in the witness's high cognitive esteem and their low cognitive esteem. This divergence in cognitive esteem is significant for manipulation. However, the confession of the supremacy of the witness by the committee members is a kind of flattery, that is, as stated by Akopova (2013), an effective method to achieve manipulation. Besides, the witness was praised and supported by the committee members. They also shared with the witness their awareness of the uncomfortable situation and their solidarity with him concerning regulation law adoption. This strategic use of evidentials could be said to reflect what Akopova (2013, p. 81) called "Productive manipulation", that is

identified as the manipulator's recognition as a 'voluntary donor', which means that the speakers (committee members) situate the listener (witness) in the position of superiority and social welfare.

It has also transpired from the analysis that the Facebook Team pointed out the legitimacy of the activities of Facebook. However, they insisted on the relevance and efficiency of the advertisements Facebook showed by implying the negligence of users' willingness concerning privacy and ads. Furthermore, they insinuate that the conditional free use of Facebook is related to ads appearance. This is to say that the Facebook team had no doubt about their mode of business and had no intention to reconsider their business, which is a sign of strength and confidence. Furthermore, the team expressed a high social position and underestimated the users' knowledge (people's poor knowledge about data settings control). On the contrary, they shared the belief in the personnel's undoubted competence in the domain. Moreover, the team expressed comprehensiveness about the worries and dissatisfaction of the committee and users, which is at stake as a psychological factor. In addition, the Facebook team misused the expressions 'data control' and 'privacy', and expressed uncertainty about responses, which are tools to create fuzziness and misunderstandings. So, the team members reflected themselves as confident, strong, and experts, and caused misunderstandings. This strategy reflects the generation of mind-blocking that is recognised as a manipulative strategy by Saussure (2005).

Further implications of the above discussion related to how the witness insisted on the legitimate use of data and Facebook's implication in these difficulties because of the interference of others (Cambridge Analytic, Dr. Kogan, and foreigners' interference). Besides, he repeatedly expressed the belief in the good intentions of Facebook and stated the good actions Facebook had taken. He also asserted that people misunderstood the fact that Facebook had never focused on users' data, used users' data, or sold users' data. However, Facebook repeatedly asked for users' data and used users' data to show relevant ads and sold users' links to ads companies regarding their needed potential customers' profiles for their services or products. This is to say that the witness told the version from the suitable angle and used the suitable words to deceive the committee members, especially since they could barely make the distinction between what the witness said and what he could say, i.e., they (the majority of committee members) could barely distinguish between the chosen meaning and the potential meanings since their knowledge about the technology was narrow. Thus, this act of misrepresentation of reality and violation of the Quality maxim and the Quantity maxim was

with the aim of causing a shift in the perception of these members, which is an act of manipulation.

In addition, the witness believed in the supremacy (higher cognitive esteem) regarding the (or some) interlocutors and people's poor knowledge about the domain, despite the fact that the evidential expressions' investigation showed the witness's high use of thought as an evidence in his testimony as well as hearsay expressions that were based on the other parties' (opponents') declarations and certifications. Regarding the witness's position and knowledge about the domain, the use of thought and hearsay as source-based modes of knowing is an act of misinformation and violation of Maxims. Still, the witness believed in the supremacy (higher cognitive esteem) regarding the (or some) interlocutors and people's poor knowledge about the domain. As a result, the evidentials use reflects the witness as being less informative and deceptive; he has perfectly intended to breach conversational maxims, in addition to the misuse of concepts: 'data control' and 'privacy', and uncertainty about the majority of responses. This means that the witness's use of evidentials reflects an act of manipulation.

The manipulative procedure highlighted and discussed in chapter two was determined regarding the discussions of the results as shown in Table 4.85 above, according to which it is possible to deduce that the questioners do not reflect the profile of a manipulative interlocutor. Conversely, the committee members are deemed to be unsuccessfully manipulative, with the intention of manipulation, as could be construed based on the shared sphere, cooperativeness, and belief in the company's principles; this intention can also be the result of the mixed interactions of interlocutors (group's speech). Expressed differently, the Facebook Team and the witness are deemed to reflect the profile of a manipulative interlocutor(s).

It has also transpired from the discussion that the types of manipulation used by the interlocutor(s) in the corpora are reconsidered regarding the types of manipulation listed in chapter two, according to Akopova (2013) and Barnhill (2014) (see Table 4.86 above). What emerges is that the interlocutors have used different types and strategies. The question askers of the Letter had no manipulative strategy. Conversely, the Committee members used an intentional direct to the hearer(s) manipulation. This manipulation is built upon productive communicative skills (inferiority) to get an evaluative and responsive reaction. However, it was not clear if the Committee members tended for a Person-oriented or Society-oriented manipulation. Still, if the committee members used a person-oriented manipulation, this act of manipulation would be acceptable ((un)ethical, depending on the congress's rules) to get

information from the witness. On the other hand, if the committee members used Society-oriented manipulation, this means that the committee members would be working on misleading the public opinion. Yet, regarding the use of productive communicative skills, the committee members (some of them) mostly tended to mislead public opinion. It is also acceptable to understand that the committee members tried to manipulate both witness and public opinion. On the other hand, the Facebook team and the witness used intentional, direct and indirect society-oriented manipulation throughout actualizing communicative skills to get a rational reaction. It becomes clear that the manipulative act that occurred at the hearings was successful. The witness's discourse perfectly reflected the manipulative act using the mind blocking throughout the misrepresentation of reality and misuse of concepts, at a time when the committee members' discourse indecisively reflected the profile of a voluntary manipulated and a manipulator of witness and public opinion.

5.2 Synthesis of the Main Findings

In order to synthesise the outcomes of this dissertation, this section is composed of the major findings, the implications, and contributions of this research, respectively.

5.2.1 Major findings

This research gave birth to five main outcomes. The later are listed in what follows:

- First, manipulation as a linguistic phenomenon can hardly be investigated in the discourse of a group, especially when the group is not working cooperatively.
- Second, affect and evidential 'markers' as pure linguistic units taken out of context are not sufficient, on their own, to help in detecting manipulation in a discourse; however, affect and evidential 'expressions' do, since they are anchored in a specific context.
- Third, and as a fundamental finding, the evidential expressions reflect the cognitive esteem of both interlocutors, social power and issues, and some affect notions, which means that the ideological shift could be achieved via the use of the evidential expressions; and this implies that the manipulation could be practiced through evidential expressions. In other words, the evidential expressions contribute to the construction of manipulation throughout the participation in sharing about the cognitive esteem and social position of the interlocutors. These expressions, which carry the mode and source of knowledge in addition to reliability, commitment, hedging, authority, and responsibility as epistemic values towards the information transmitted, convey interesting (truthful or falsified) connotations to practice manipulation. The truthfulness and falsity of the evidential expressions'

interpretations depend on the situational context. The truthful connotation transmits the speaker's (writer's) attitude and cognitive and/or social position of the user (speaker or writer), whereas the untruthful connotation misleads the hearer(s) towards fuzzy and fake illusions (falsified reality).

- Fourth, it is also observed that the use of specific types of evidentials is related to specific cases, like the expression of experience via visual evidential markers in the past tense and the expression of mental process of comprehension via visual evidential markers. It is also observed that the expression of comprehension serves the mental process as a belief mode and inference.
- The fifth, and last outcome, is that affect expressions reflect the speaker(s)'s communicated affectual situation and some beliefs. Consequently, affect expressions can contribute to the practice of manipulation, depending on the reaction wanted by the manipulator. In this case, some of the interlocutors (manipulator(s)) opted for a rational manipulation that is mostly based on ideological shifts rather than affectual impact and others opted for the evaluative manipulation. In the following subsection, the implications of this research are presented.

5.2.2 Implications

This study would undoubtedly be used for pedagogical purposes in several domains. First of all, it could be used in teaching Pragmatics since it has mainly dealt with the Conversational Maxims, fuzzyness production tools and Critical Discourse Analysis of power use. Second, it can also be invested in Methodology of research in regard to the recent reviews on Corpus Linguistics. It, furthermore, promotes Computer-assisted Linguistics, that is the use of computer-assistance (human and computer) in corpus analysis.

Besides, the Sociology and Psychology domains could be interested in the way the sociological and psychological dimensions and mechanisms of the phenomenon of manipulation are exposed in this research. In particular, this study was based on exposing communicative goals and social position as sociological factors, and intention as psychological factors.

In the same vein, Cognitive Science, as a domain, is potentially interested in the way this research identifies information processing and problems of understanding. Moreover, since this research dealt with the study, use, and abuse of legal language, so, Forensic Linguistics (Pragmatics) is concerned with the development and perception of this research. Sixth, in tandem with the legal language, this research would also be used for English for Specific Purposes courses to refer to commitment and detachment (self-engagement) from information

in Legal Discourse. Yet, it can also be used in academic writing courses because it highlights evidentials as linguistic tools for self-expression.

In addition to these implications, this research contributes at different levels, mainly theoretical, practical, and pedagogical. These contributions are presented in the following subsection.

5.2.3 Contributions of this research

This section meets the theoretical, practical, and pedagogical contributions of this research, respectively. The first subsection deals with the theoretical contributions.

5.2.3.1 The theoretical contributions of the research. This subsection gathers the set of contributions of the research to the literature on manipulation, affect, and evidentiality, respectively. In the following, the contributions of this research to the literature on manipulation are clarified.

5.2.3.1.1 The contribution of the research to the literature on manipulation. This research sheds light on a set of points concerning Manipulation. First, this research generally tackles the phenomenon of manipulation from the social, psychological, linguistic and cognitive perceptions. Simply put, manipulation is mostly seen and identified as social, psychological, and linguistic practice of exerting influence over the interlocutor(s). However, this research contributed in defining manipulation as the violation of cognitive processing of information. Second, the pragmatic features of manipulative discourse are reviewed and represented. Specifically, the conversational maxims are discussed as being violated in cases of manipulative statements. Nevertheless, the Manner and Quantity maxims are satisfactorily expanded in this research (see Section 1.1.2.1.2.2 Pragmatic features of manipulative discourse).

Third, in opposition to Saussure (2005), the perception of Reflective belief holder is reviewed in regard to Allott (2005). Saussure's (2005) statement of sharing a belief known as false as having psychiatric troubles is exceptional to groups of 'sects', as mentioned earlier in chapter two, like the case of Mrs. Kee studied by Festinger, Riecken and Schachter (1956). However, the expression of a belief known as false implies that the holder of this belief is simply misinformed or owning different beliefs. Further, this issue of Belief is deeply debated in relation to reliability. This point is expanded in the next subsection as a contribution to the literature on evidentiality.

Fourth, and last, manipulative strategy is reconstructed by correlating Saussure's (2005) manipulation procedure regarding van Dijk's (2006) perception. This procedure is built on the synthesis of the research on manipulation. It highlights the possible stages and steps to achieve a linguistic manipulative practice. In the following subsection, the contribution of this research to the literature on Affect is brought.

5.2.3.1.2 *The contribution of the research to the literature on affect.* In line with Hoyer (2014), the meaning of modal expressions is held to be cumulative (i.e., the outcome of the interaction between different indicators of modality). Similarly, this research contributes to the literature on affect in the sense that it clarifies a set of points concerning Affect use. It has been shown that there is no necessary one-to-one correlation between the positivity and negativity of affect markers, taken separately on their own, and the positivity and negativity of the affect expressions taken cumulatively in context (see section 4.2.1). Differently expressed, the negativity (or positivity) of affect markers is not directly and inevitably related to the whole impact of the affect expression.

This research mainly demonstrates that affect expressions generally contribute to the manipulative act, especially when the manipulator(s) seek(s) evaluative and emotional reactions. Explicitly, affect use reflects the speaker(s) or writer(s)' affectual implication with the interlocutor(s), situation, and/or the communicative event. Consequently, affect expressions are implicated within manipulative mechanisms in sharing a psychological and affectual position, to reflect speaker(s) or writer(s)'s good-image and their attitude towards the interlocutor(s), a situation, or the communicative event. Also, these tokens are used in negatively reflecting others.

Furthermore, affect expressions are implicated with the creation of the shared sphere as a step in a strategy of manipulation. Similarly, image bleaching as a step in a strategy of manipulation is reflected by these tokens. This image bleaching falls under the cases of falsity and truthfulness of Belief according to Saussure (2005). That is to say, if the speaker(s) (or writer(s)) believes in the positive image, the act would be persuasive regarding the interlocutors' intentions. However, if the positive image is known, believed, or doubted by the speaker(s) (or writer(s)) to be false and communicated as true, then the speaker(s) (or writer(s)) is (are) manipulative. In addition to the contribution to the literature on affect, this study also contributes to the literature on Evidentiality, as discussed in the following subsection.

5.2.3.1.3 The contribution of this research to the literature on evidentiality. This research also contributed to the literature on evidentiality concerning the following points: This research, firstly, argues that belief markers categorization is a must; as shown in this research, the Thought, Belief (conviction), and knowing are different expressions with different connotations. Also, the expressions of shared-knowledge and comprehension are considered as categories of belief evidentials expressions. This is to say that the categorization of evidentials should be reviewed.

Secondly, belief is reconsidered in comparison to knowledge. In other words, the reliability of expression of belief is debated in regard to the reliability of expression of knowledge. This is actually a philosophical debate that is briefly discussed in this research to contribute to a gap in the reliability scale of evidentiality provided by Chafe (1986), in which he marginalised Belief as having a problematic source of knowledge.

Third, and last, this research mainly demonstrates as a contribution to the literature on evidentiality that evidential expressions generally contribute to the manipulative act. Explicitly, evidential use reflects the speaker(s)' or writer(s)' attitudinal implication with the information shared. This attitudinal implication is the interlocutor(s)'s familiarity with the information, that reflects the speaker's commitment, detachment, and hedging of the responsibility of claiming the information, which in its turn mirrors the speaker's social position in comparison to the interlocutor(s). Consequently, evidential expressions are implicated within manipulative mechanisms in sharing mainly the social position of the interlocutors. Also, cognitive esteem might be reflected by evidential expressions, depending on the context.

As previously mentioned, this section gathers the theoretical, practical, and pedagogical contributions of this research, respectively. The subsection above has exposed the theoretical contributions. Thus, the following subsection develops the practical contribution of this research that deals with the way this research contributes to the understanding of the case studied.

5.2.3.2 The practical contribution of the research. This study sheds light, on the one hand, on the interviewers' moderate knowledge about the issue discussed, cooperativeness, and tolerance, and, on the other hand, the interviewees' focus on the image bleaching, dissatisfaction, and regrets. These remarks lead to the supposition of the ownership or the use of this platform by specific parties (like the US government or any other governmental party) that need to bleach the image of Facebook to be used by people for unknown goals (that could be spying and/or leading population movements). This supposition is also built because of the unserious reaction of the US government to the breaches: the breach for the electoral manipulation and the breach by the Russian individuals (as claimed by the US government and unconfirmed and disregarded by the Russian government). Thus, it confirms the assumption of the whole hearing as being a kind of play to mislead public opinion. Otherwise, it confirms the idea of a huge kind of cyberwar that is being active, and Facebook is playing an interesting role in it. The next subsection deals with this research's contribution to pedagogy.

5.2.3.3 Pedagogical contribution of the research. This research also contributes to the pedagogy of teaching as self-oriented learning of English language learners and researchers. This input concerns the familiarisation of the learners and researchers with the evidential markers with the aim of better expressing themselves when writing and analytically reading. Concerning research in linguistics, the quantitative investigation of affect and evidential markers would never be sufficiently effective and useful. This is to say that the use of automatic annotation of affect and evidential markers (like Biber and Finegan's 1989 and Chafe and Nicholas' 1986 taxonomies, respectfully) using corpus tools like Antconc or the automatic annotation on the UMA corpus tool is misleading.

The investigated affect and evidential expressions and the methodology used in this research are checked and validated. In the following section, the validation and comments of the validators are exposed.

5.4 Validation

For the validation of this research, Pr. Stanislaw Goźdź-Roszkowski, Pr. Mohammed Melliani, and Dr. Rym Benguerba were contacted. Pr. Goźdź-Roszkowski is an Associate Professor at the University of Lodz, Poland, and an expert in Corpus Linguistics and Legal Discourse. He confirmed the effectiveness of the methodology used in this research and insisted on the importance of linking the approaches to specific goals. Pr. Melliani (Associate Professor at the University of Oran-2-, Algeria) confirmed the global perception and insisted on the

simplification and directness in the analysis part. Dr. Benguerba (Lecturer at the University of Bechar, Algeria) has received a total of 80 expressions, 30 expressions from Affect expressions, and 50 expressions from the evidential expressions annotated (chosen in impair classification from the lists). She confirmed the annotated expressions and the significance of the results, and she pointed out the importance of paying attention to the meaning of the evidential expressions. The following section deals with the limitations of this research.

5.5 Limitations

The present study has a set of limitations that are presented in the following:

- This study focuses on the verbal means of manipulation, which are called manipulative discourse. This is to say that the non-verbal means of manipulation are not taken into consideration.
- The phenomenon of manipulation, in this research, is studied as a social, psychological, cognitive, and linguistic phenomenon. It has not taken into consideration the cross-cultural pragmatic dimension. Also, the gender aspect could not be taken into consideration because the studied corpora is the group's discourse, which means that the interlocutors are males and females belonging to different backgrounds.
- This research has taken into consideration the deliberate linguistic manipulation. This is to say that the undeliberate manipulation is not taken into consideration. As for the phenomenon of undeliberate manipulation, which is briefly discussed in Saussure (2005), it is beyond the scope of the present study. This does not necessarily belittle the potential importance of this line of research.
- This research focuses on the contribution of affect and evidentials to manipulation. It does not fall under the scope of conversation analysis because it does not take into account the sequential relationship between the questions and the answers. However, Conversational Analysis would be an interesting area of investigation for future research.
- The non-evidential expressions must also be concerned with manipulation. However, in this research, only the evidential and affect expressions were investigated.
- The phonological and the typological levels of the spoken and written corpora, respectively, could have been related to the manipulateness of a discourse. However, they are not taken into consideration because of the focalisation of the research on the semantic and pragmatic use of the investigated features only. In the following section, prospects for future research are provided.

5.6 Suggestions for Future Research

In this section, some suggestions concerning future research are provided, namely:

- Non-verbal means like gestures, grimaces, body language, and even hair and clothing styles implication with manipulation in Hearings or courtrooms seem to be a good yard of investigation.
- The study of manipulation as a cultural phenomenon could also be an interesting yard for cultural research. In other words, manipulation could also be seen as a linguistic tool, as a part of communication in specific cultures.
- The contrast between the use of strategies and types of manipulation by males and females would undoubtedly give birth to interesting findings. Some scholars in psychology (cf. Buss et al. (1987)) have already scrutinised this path from a purely psychological perspective.
- The comparison between the use of affect and evidentials by males and females in any specific genre would also give birth to significant research.
- The investigations of the implication of evidential and/or affect markers or expressions in manipulation in daily conversation must also provide important outcomes.
- The Conversation Analysis of hearings and courtroom discussions must reveal the characteristics of the studied genre, and must also be fruitful concerning manipulative practice in language.
- The investigation of the implication of non-evidential expressions in the linguistic manipulation must reveal important findings.
- Affect expressions implication with specific types of manipulation (especially emotional and evaluative) could be investigated.
- The way (structure, tense, etc.) the expression of comprehension conveys the mental process of belief and/or inference may lead to fruitful outcomes.
- Affect expressions generally contribute to the manipulative strategy, especially when the manipulator(s) seek(s) an evaluative and emotional reactions. This is to say that a study can be conducted to investigate the implication of affect expressions in specific types of manipulation, such as evaluative and emotional reactions.
- The credibility, as expected, epistemic value transmitted throughout evidential markers is seen by this research as a dependent value of trustworthiness of the speaker (writer) regarding his understanding and communicative competence. Yet, this point needs further research and investigation.

Conclusion

In this concluding chapter, the main findings that highlight the relationship between Affect, Evidentials, and manipulation are recapitulated. This chapter also outlines the major findings and implications. Additionally, it principally organised the contributions of this research, which gathers all of the theoretical, practical, and pedagogical contributions. Furthermore, it exposes the validators and their comments, and outlines a set of limitations that clearly draw the frontiers of this research. It concludes by offering suggestions for future research inspired by this research.

Bibliography

- "Hearings in the US Senate: A guide for preparation and procedure", (2010) Congressional Research Service, the Library of Congress.
<https://www.everycrsreport.com/reports/RL30548.html>
- Afzal, S., & Hassan, A. (2021). Using Rhetorical and Persuasive Techniques: A Political Discourse Analysis of the Victory Speech by Imran Khan. *Journal of Communication and Cultural Trends*, 3(2), 105-121.
- Aijmer, K., & Fetzer, A. (2014). Discourse linguistics: Theory and practice. *Functions of Language*, 21(1), 1-5.
- Aikhenvald, A. Y. (2004). Nominal classification: Towards a comprehensive typology. *STUF-Language Typology and Universals*, 57(2-3), 105-116.
- Aikhenvald, A. Y. (2006). Evidentiality in grammar. Elsevier.
- Aikhenvald, A. Y. (2007). Information source and evidentiality: what can we conclude. *Rivista di linguistica*, 19(1), 209-227.
- Aikhenvald, A. Y. (2015). Evidentials: Their links with other grammatical categories. *Linguistic Typology*, 19(2), 239-277.
- Aikhenvald, A. Y., & Dixon, R. M. W. (2003). Studies in Evidentiality. *John Benjamins. Typological Studies in Language* 54.
- Aikhenvald, A. Y., & LaPolla, R. J. (2007). New perspectives on evidentials: A view from Tibeto-Burman. *Linguistics of the Tibeto-Burman Area*, 30(2), 1-16.
- Akopova, A. (2013). Linguistic manipulation: Definition and types. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 1(2), 78-82.
- Alaei, M., & Ahangari, S. (2016). A Study of Ideational Metafunction in Joseph Conrad's "Heart of Darkness": A Critical Discourse Analysis. *English Language Teaching*, 9(4), 203-213.
- Aldridge, M., & Luchjenbroers, J. (2007). Linguistic manipulations in legal discourse: Framing questions and 'smuggling' information. *International Journal of Speech, Language & the Law*, 14(1).
- Aleksić, G., & Bebić-Crestany, D. (2022). Translanguaging stance of preschool teachers working with multilingual children in Luxembourg. *International Journal of Multilingualism*, 1-18.
- Aleksic, V., & Ivanovic, M. (2016). Psychometric evaluation of the reliability of IPVIS-OS multiple intelligences assessment instrument for early adolescents. *Journal of Educational Sciences and Psychology*, 6(1).
- Allot, N. (2005). The role of misused concepts in manufacturing consent. *Manipulation and ideologies in the twentieth century: Discourse, language, mind*, 147-168.

- Allott, N. (2005). Paul Grice, reasoning and pragmatics. *UCL Working Papers in Linguistics*, 17, 217-243.
- Allott, N. (2013). Relevance theory. In *Perspectives on linguistic pragmatics* Springer.
- Allott, N., & Rubio Fernandez, P. (2002). This paper fills a much-needed gap. *Actes de l'Atelier des doctorants en linguistique*, 97-102.
- Almurashi, W. A. (2016). An introduction to Halliday's systemic functional linguistics. *Journal for the study of English Linguistics*, 4(1), 70-80.
- Avis, J., & Harris, P. L. (1991). Belief-desire reasoning among Baka children: Evidence for a universal conception of mind. *Child development*, 62(3), 460-467.
- Baklouti, A. S. (2007). Degrees of implicitness in the expression of Ideology: Freedom of expression vs. racism in the Prophet Cartoon Controversy. *Studies in Islam & the Middle East*, 4(2).
- Barbet, C., & De Saussure, L. (2012). Présentation: Modalité et évidentialité en français. *Langue française*, 173(1), 3-12.
- Barnhill, A. (2014). What is manipulation. *Manipulation: Theory and practice*, 50, 72.
- Bavali, M., & Sadighi, F. (2008). Chomsky's Universal Grammar and Halliday's Systemic Functional Linguistics: An Appraisal and a Compromise. *Journal of Pan-Pacific Association of Applied Linguistics*, 12(1), 11-28.
- Bednarek, M. (2006). Evaluation in media discourse: Analysis of a newspaper corpus. *A&C Black*.
- Benoit, D. (1998). La «manipulation» dans la communication. *Communication et organisation. Revue scientifique francophone en Communication organisationnelle*, (13).
- Berk-Seligson, S. (2008). An introduction to forensic linguistics: language in evidence. *Malcolm Coulthard and Alison Johnson (2007). Routledge*. 237pp. ISBN 0-415-32023-2.
- Berk-Seligson, S. (2009). Coerced confessions. *Coerced Confessions. De Gruyter Mouton*.
- Berk-Seligson, S. (2011). Negotiation and communicative accommodation in bilingual police interrogations: A critical interactional sociolinguistic perspective.
- Bhatia, V. K. (1987). Language of the law. *Language teaching*, 20(4), 227-234.
- Bhatia, V. K. (1993). Analysing Genre: Language Use in Professional Settings. *Longman press*.
- Bhatia, V. K. (2002). Applied Genre Analysis: A Multi-Perspective Model. *Ibérica*, 4, 3-19.
- Bhatia, V. K. (2004). Worlds of Written Discourse: A Genre-Based View. MPG Books Ltd.

- Bhatia, V. K. (2015). Critical genre analysis: theoretical preliminaries. *HERMES-Journal of language and communication in business*, (54), 9-20.
- Bhatia, V. K., & Nodoushan, S. (2015). Genre Analysis: The State of the Art (An Online Interview with Vijay Kumar Bhatia). *Online Submission*, 9(2), 121-130.
- Biber, D. (1988). *Variation Across Speech and Writing*. Cambridge University Press.
- Biber, D., & Conrad, S. (2009). *Register, genre and style*. Cambridge University Press.
- Biber, D., & Finegan, E. (1989). Drift and the evolution of English style: A history of three genres. *Language*, 487-517.
- Biber, D., & Finegan, E. (1989). Styles of stance in English: Lexical and grammatical marking of evidentiality and affect. *Text-interdisciplinary journal for the study of discourse*, 9(1), 93-124.
- Blass, R. (2002, October). Manipulation in the Speeches and Writings of Hitler and the NSDAP. In *Paper delivered at the International Conference on Manipulation in the Totalitarian Regimes of the XXth Century, Ascona, Switzerland, Sept. 29th–Oct. 3rd*.
- Blass, R. (2005). Manipulation in the speeches and writings. *Manipulation and ideologies in the twentieth century: Discourse, language, mind*, 17, 169.
- Bloom, P., & German, T. P. (2000). Two reasons to abandon the false belief task as a test of theory of mind. *Cognition*, 77(1), B25-B31.
- BonJour, L. (1980). Externalist theories of empirical knowledge. *Midwest studies in philosophy*, 5, 53-73.
- Botha, R. P. (1989). Challenging Chomsky. *The generative garden game*.
- Boye, K. (2006). *Epistemic meaning: A cross-linguistic*. (Doctorate dissertation, University of Copenhagen).
- Boye, K. (2010a). Semantic maps and the identification of cross-linguistic generic categories: Evidentiality and its relation to epistemic modality. *Linguistic Discovery* 8(1): 4–22.
- Boye, K. (2010b). Evidence for what? Evidentiality and scope. *STUF* 63(4): 290–307.
- Boye, K. (2012). Epistemic meaning. *Epistemic Meaning. De Gruyter Mouton*.
- Boye, K. (2012). Epistemic meaning: A crosslinguistic and functional-cognitive study. *Mouton de Gruyter*.
- Boye, K., & Harder P. (2009) Evidentiality. Linguistic categories and grammaticalization. *Functions of Language* 16 (1): 9-43.
- Buss, D. M. (1987). Selection, evocation, and manipulation. *Journal of personality and social psychology*, 53(6), 1214.
- Carr, T. P. (2006, June). Hearings in the House of Representatives: A guide for preparation and procedure. Congressional Research Service, *the Library of Congress*.

- Carretero, M. (2013). Review of: BOYE, K. (2012). Epistemic Meaning. A Crosslinguistic and Functional-Cognitive Study. Empirical Approaches to Language Typology 93. Berlin & Boston: *De Gruyter Mouton*. *LINGUISTICS*, 51 (6): 1401-1410.
- Carretero, M., & Zamorano, J. R. (2013). Annotating English adverbials for the categories of epistemic modality and evidentiality. In: Marín Arrese, J., Carretero, M., Arús, J. & van der Auwera J. (eds.) English Modality: Core, Periphery and Evidentiality. Topics in English Linguistics, 81. Berlin: *Mouton De Gruyter*. 317-355.
- Carretero, M., & Zamorano-Mansilla, J. R. (2012). Disentangling epistemic modality, neighbouring categories and pragmatic uses: The case of English epistemic adverbs. *Collection linguistique Épilogos*.
- Carston, R. (2002). Linguistic meaning, communicated meaning and cognitive pragmatics. *Mind & Language*, 17(1-2), 127-148.
- Carston, R. (2002). Metaphor, ad hoc concepts and word meaning—more questions than answers. *University College London*, 83-105.
- Celce-Murcia, M., Dörnyei, Z., & Thurrell, S. (1995). Communicative competence: A pedagogically motivated model with content specifications. *Issues in Applied Linguistics*, 6(2), 5-35.
- Chafe, W. L., & Nichols, J. (Eds.). (1986). *Evidentiality: The linguistic coding of epistemology* (Vol. 20, pp. 261-312). Norwood, NJ: *Ablex Publishing Corporation*.
- Chalimah, C., Santosa, R., Djatmika, D., & Wiratno, T. (2018, August). Evaluating attitudes in news text: Appraisal in critical discourse study. *Fourth Prasasti International Seminar on Linguistics (Prasasti 2018)* (pp. 54-59). Atlantis Press.
- Chandler, D. (1997). An introduction to genre theory.
- Chapman, S. (2005). Logic and conversation. In *Paul Grice, Philosopher and Linguist* (pp. 85-113). Palgrave Macmillan.
- Cheng, H. F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 153-174.
- Cheng, L., & Danesi, M. (2019). Exploring legal discourse: A sociosemiotic (re) construction. *Social semiotics*, 29(3), 279-285.
- Chilton, P., & Schäffner, C. (2011). Discourse and politics. *Discourse studies: A multidisciplinary introduction*, 303-330.
- Chomsky, N. (1990). On formalization and formal linguistics. *Natural language & Linguistic theory*, 143-147.
- Chouliaraki, L., & Fairclough, N. (2010). Critical discourse analysis in organizational studies: Towards an integrationist methodology. *Journal of management studies*, 47(6), 1213-1218.

- Chung, S., & Kim, J. (2022). Systematic literature review of legal design: Concepts, processes, and methods. *The Design Journal*, 1-18.
- Cornillie, B. (2009). Evidentiality and epistemic modality: On the close relationship between two different categories. *Functions of language*, 16(1), 44-62.
- Cornillie, B., Arrese, J. I. M., & Wiemer, B. (2015). Evidentiality and the semantics-pragmatics interface: An introduction. *Belgian Journal of Linguistics*, 29(1), 1-18.
- Coulthard, M. & Johnson, A. (2010). *The Routledge Handbook of Forensic Linguistics*. London: Routledge, 2007.
- Coulthard, M., & Johnson, A. (2004). An Introduction to Forensic Linguistics London; *The Routledge Handbook of Forensic Linguistics*, 602.
- Coulthard, M., Garner, M., Johnson, E., Olsson, J., Cotterill, J., Chaski, C., & Hall, P. (2004, July). Conference on Forensic Linguistics/Language and Law 2004/4th-5th July, 2004. *Conference on Forensic Linguistics/Language and Law* (Vol. 4, No. 5th).
- Coulthard, M., Johnson, A., & Wright, D. (2016). *An introduction to forensic linguistics: Language in evidence*. Routledge.
- Craig, M. G. (2014). Horizon of Influence. *Journal of Studies in Social Sciences*, 8(1).
- Cutting, J. (2002). *Pragmatics and Discourse*. Routledge of Pragmatics.
- de Grefte, J. (2021). Knowledge as justified true belief. *Erkenntnis*, 88(2), 531-549.
- De Haan, F. (1999). Evidentiality and epistemic modality: Setting boundaries. *Southwest journal of linguistics*, 18(1), 83-101.
- de Haan, M., Johnson, M. H., Maurer, D., & Perrett, D. I. (2001). Recognition of individual faces and average face prototypes by 1-and 3-month-old infants. *Cognitive development*, 16(2), 659-678.
- De Saussure, L. (2005). Manipulation and cognitive pragmatics. *Manipulation and ideologies in the twentieth century*, 113-145.
- De Saussure, L., & Schulz, P. (Eds.). (2005). *Manipulation and ideologies in the twentieth century: Discourse, language, mind* (Vol. 17). John Benjamins Publishing.
- Dendale, P., & Tasmowski, L. (2001). Introduction: Evidentiality and related notions. *Journal of pragmatics*, 33(3), 339-348.
- Derolez, R., & Simon-Vandenberghe, A. M. (1988). Gothic *saihw* and *sai*, with some notes on imperative interjections in Germanic. *Languages and Cultures: Studies in Honor of Edgar C. Polomé*, 36, 97.
- Eggs, S. (2004). Introduction to systemic functional linguistics. *A&c Black*.
- Eggs, S., & Slade, D. (2004). Analysing casual conversation. *Equinox Publishing Ltd*.

- Emna, F., & Mounir, T. (2022). The negotiation of authorial persona in dissertations literature review and discussion sections. *Russian Journal of Linguistics*, 26(1), 51-73.
- England, N. C., Dixon, R. M., & Aikhenvald, A. Y. (2004). Adjectives in Mam. *Adjective classes: A cross-linguistic typology*, 125-146.
- Epps, P. (2005). Areal diffusion and the development of evidentiality: Evidence from Hup. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 29(3), 617-650.
- Fairclough, N. (1992). Discourse and text: Linguistic and intertextual analysis within discourse analysis. *Discourse & society*, 3(2), 193-217.
- Fairclough, N. (1992). Intertextuality in critical discourse analysis. *Linguistics and education*, 4(3-4), 269-293.
- Faller, M. (2006). Evidentiality and epistemic modality at the semantics/pragmatics interface. <http://www.eecs.umich.edu/~rthomaso/lpw06/fallerpaper.pdf>.
- Faller, M. T. (2002). Semantics and pragmatics of evidentials in Cuzco Quechua. *stanford university*.
- Fetzer, A. (2014). Foregrounding evidentiality in (English) academic discourse: Patterned co-occurrences of the sensory perception verbs seem and appear. *Intercultural Pragmatics*, 11(3), 333-355.
- Fetzer, A., & Oishi, E. (2014). Evidentiality in discourse. *Intercultural Pragmatics*, 11(3), 321-332.
- Fitneva, S. A. (2009). Evidentiality and trust: The effect of informational goals. *New Directions for Child and Adolescent Development*, 2009(125), 49-62.
- Fitneva, S. A., & Matsui, T. (2009). Evidentiality: A window into language and cognitive development. *Jossey-Bass*.
- Fox, B. A. (2001). Evidentiality: Authority, responsibility, and entitlement in English conversation. *Journal of linguistic anthropology*, 11(2), 167-192.
- Frajzyngier, Z. (2005). Aikhenvald, A. Y. & Dixon, R. M. W. (eds.), Studies in evidentiality (Typological Studies in Language 54). *Amsterdam & Philadelphia, PA: John Benjamins*, 2003. Pp. xiv+ 345. *Journal of Linguistics*, 41(1), 177-182.
- Fraser, B. (2009). An account of discourse markers. *International review of Pragmatics*, 1(2), 293-320.
- Fuoli, M. (2015). Combining APPRAISAL and CDA in the Analysis of Corporate Discourse. In *42nd International Systemic Functional Congress*. Aachen.
- Furko, P. (2017). Manipulative uses of pragmatic markers in political discourse. *Palgrave Communications*, 3(1), 1-8.

- Galasiński, Katarzyna Skowronek, D. (2001). Naming the nation: A critical analysis of names in Polish political discourse. *Political Communication*, 18(1), 51-66.
- Gibbons, J. (2003). Forensic linguistics: An introduction to language in the justice system. *John Wiley & Sons*.
- Gibbons, John, ed. 1994. Language and the Law. London and New York: *Longman*.
- Givón, T. (1982). Evidentiality and epistemic space. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 6(1), 23-49.
- Goldstein, I., Li, Y., & Yang, L. (2014). Speculation and hedging in segmented markets. *The Review of Financial Studies*, 27(3), 881-922.
- Goodrich, Peter. 1992. Legal Discourse. Houndmills: Macmillan.
- Goźdź Roszkowski, S., & Pontrandolfo, G. (2013). Evaluative patterns in judicial discourse: a corpus-based phraseological perspective on American and Italian criminal judgments.
- Gozdz-Roszkowski, S. (2011). Patterns of Linguistic Variation in American Legal English: A Corpus-Based Study. *Bern: Peter Lang*.
- Gozdz-Roszkowski, S. (2013). Exploring Near-Synonymous Terms in Legal Language. A Corpus-Based, Phraseological Perspective. *Linguistica Antverpiensia*, 12. <https://lanstts.uantwerpen.be/index.php/LANS-TTS/article/view/236/214> (accessed December 1, 2016).
- Goźdź-Roszkowski, S. (2018). Values and valuations in judicial discourse. A corpus-assisted study of (dis) respect in US Supreme Court decisions on same-sex marriage. *Studies in Logic, Grammar and Rhetoric*, 53(1), 61-79.
- Goźdź-Roszkowski, S. (2021). Corpus linguistics in legal discourse. *International Journal for the Semiotics of Law-Revue internationale de Sémiotique juridique*, 34(5), 1515-1540.
- Goźdź-Roszkowski, S. (2021). Corpus linguistics in legal discourse. *International Journal for the Semiotics of Law-Revue internationale de Sémiotique juridique*, 34(5), 1515-1540.
- Grice, H. P. (1975). Logic and conversation. In *Speech acts* (pp. 41-58). Brill.
- Grice, H. P. (1978). Further notes on logic and conversation. In *Pragmatics* (pp. 113-127). Brill.
- Grice, P. (1968). Utterer's meaning, sentence meaning and word meaning. *Foundations of Language*, 4, 225-242. Reprinted in Grice 1989b: 117-37.
- Grice, P. (1975). Logic and conversation. *P. Cole and J. Morgan (eds), Syntax & Semantics 3: Speech Acts* (pp. 41-58).
- Grice, P. (1981). Presupposition and conversational implicature. *P. Cole (ed.), Radical Pragmatics* (pp. 183-198).
- Grice, P. (1991). *Studies in the Way of Words*. Harvard University Press.
- Gurajek, B. (2010). Evidentiality in English and Polish.

- Halliday, M. A. (2009). Methods–techniques–problems. *Continuum companion to systemic functional linguistics*, 59-86.
- Halliday, M. A. K. "Spoken and written modes of meaning." *Media texts: Authors and readers* 7 (1994): 51-73.
- Halliday, M. A. K., & Greaves, W. S. (2008). Intonation in the Grammar of English. *Equinox Pub.*
- Halliday, M. A. K., Matthiessen, C. M., Halliday, M., & Matthiessen, C. (2014). An introduction to functional grammar. *Routledge.*
- Hart, C. (2013). Argumentation meets adapted cognition: Manipulation in media discourse on immigration. *Journal of pragmatics*, 59, 200-209.
- Herman, E. S. (1988). a Noam CHOMSKY. Manufacturing consent: the political economy of the mass media.
- Herman, E. S., & Chomsky, N. (1988). The political economy of the mass media. *Pantheon, New York.*
- Hommerberg, C., & Paradis, C. (2014). Constructing credibility through representations in the discourse of wine: Evidentiality, temporality and epistemic control. *Subjectivity and Epistemicity. Corpus, discourse, and literary approaches to stance. Lund Studies in English*, 117, 211-238.
- Hoye, L. F. (2005). "You may think that; I couldn't possibly comment!" Modality studies: Contemporary research and future directions. Part I. *Journal of Pragmatics*, 37(8), 1295-1321.
- Hoye, L. F. (2005). "You may think that; I couldn't possibly comment!" Modality studies: Contemporary research and future directions. Part II. *Journal of Pragmatics*, 37(9), 1481-1506.
- Hoye, L. F. (2008). Evidentiality in discourse: A pragmatic and empirical account. *Pragmatics and corpus linguistics: A mutualistic entente*, 50-174.
- Hoye, L. (2014). *Adverbs and modality in English.* Routledge.
- Hyland, K. (1998). Exploring corporate rhetoric: Metadiscourse in the CEO's letter. *The Journal of Business Communication* (1973), 35(2), 224-244.
- Hyland, K. (1998). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of pragmatics*, 30(4), 437-455.
- Hyland, K. (1999). Academic attribution: Citation and the construction of disciplinary knowledge. *Applied linguistics*, 20(3), 341-367.
- Ifantidou, E. (1994). Evidentials and relevance. *University College London.*
- Ifantidou, E. (2001). Evidentials and relevance (Vol. 86). *John Benjamins Publishing.*

- Ifantidou, E. (2010). Evidentials. *L. Cummings (éd.), The Routledge Pragmatics Encyclopedia. London/New York, Routledge, 146-148.*
- Irvine, J. T. (1996). Shadow conversations: The indeterminacy of participant roles. *Natural histories of discourse, 131-159.*
- Jacobson, D. E. (1986). Types and timing of social support. *Journal of health and Social Behavior, 250-264.*
- Johansen, J. D. (2002). Literary discourse: A semiotic-pragmatic approach to literature. *University of Toronto Press.*
- Johnson, M. (2014). Experiencing language: What's missing in linguistic pragmatism?. *European Journal of Pragmatism and American Philosophy, 6(VI-2).*
- Judd, J. S., Olsen, K. J., & Stekelberg, J. (2017). How do auditors respond to CEO narcissism? Evidence from external audit fees. *Accounting Horizons, 31(4), 33-52.*
- Lakoff, R. (1972). Language in context. *Language, 907-927.*
- Laurens, S. (2003). Les dangers de la manipulation mentale. *Les Cahiers de psychologie politique, (4), E01-E01.*
- Laurens, S. (2008). Manipulations diaboliques. *Sciences Humaines, 197(10), 7-7.*
- Lazard, G. (2001). *Études de linguistique générale: typologie grammaticale (Vol. 82). Peeters Publishers.*
- Lazard, G. (2001). On the grammaticalization of evidentiality. *Journal of pragmatics, 33(3), 359-367.*
- Luchjenbroers, J., & Aldridge, M. (2007). Conceptual manipulation by metaphors and frames: Dealing with rape victims in legal discourse.
- Macuzić, I., Tadić, D., Aleksić, A., & Stefanović, M. (2016). A two step fuzzy model for the assessment and ranking of organizational resilience factors in the process industry. *Journal of Loss Prevention in the Process Industries, 40, 122-130.*
- Maillat, D. (2013). Constraining context selection: On the pragmatic inevitability of manipulation. *Journal of pragmatics, 59, 190-199.*
- Maillat, D., & Oswald, S. (2009). Defining manipulative discourse: The pragmatics of cognitive illusions. *International Review of Pragmatics, 1(2), 348-370.*
- Maley, Y. (1994). *The Language of the Law.*
- Marín Arrese, J. Haßler, G., & Carretero, M. (2017). Evidentiality revisited. *John Benjamins Publishing Company.*
- Martin, J. R. (1997). Analysing genre: Functional parameters. *Genre and institutions: Social processes in the workplace and school, 3-39.*

- Martin, J.R. & White, P .R. R. (2005). *The Language of evaluation (Appraisal in English)*. Palgrave Macmillan. <https://www.palgrave.com/us/book/9781403904096>
- Martin, M. M., Chesebro, J. L., & Mottet, T. P. (1997). Students' perceptions of instructors' socio-communicative style and the influence on instructor credibility and situational motivation. *Communication Research Reports*, 14(4), 431-440.
- Matsui, T., & Fitneva, S. A. (2009). Knowing how we know: Evidentiality and cognitive development. *New directions for child and adolescent development*, 2009(125), 1-11.
- Matsui, T., Yamamoto, T., & McCagg, P. (2006). On the role of language in children's early understanding of others as epistemic beings. *Cognitive development*, 21(2), 158-173.
- Matthiessen, M. C. M. I., & Halliday, M. A. K. (2014). *Halliday's introduction to functional grammar*.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *intelligence*, 17(4), 433-442.
- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of personality assessment*, 54(3-4), 772-781.
- Mey, J. L. (1985). *Whose Language: A Study in Linguistic Pragmatics*. John Benjamins.
- Mey, J. L. (2001). Literary pragmatics. *The handbook of discourse analysis*.
- Mey, J. L. (2003). Context and (dis) ambiguity: a pragmatic view. *Journal of pragmatics*, 35(3), 331-347.
- Mey, J. L. (2005). Literary pragmatics. *The handbook of discourse analysis*, 787-797.
- Mey, J. L. (2016). Discourse, Interests, and the Law: Some Pragma-Legal Reflections. *International Journal of Legal Discourse* 2 (1): 13–27.
- Mithun, M. (1986). On the nature of noun incorporation. *Language*, 62(1), 32-37.
- Mushin, I. (2001). Evidentiality and epistemological stance. *Evidentiality and Epistemological Stance*, 1-258.
- Mushin, I. (2001). Japanese reportive evidentiality and the pragmatics of retelling. *Journal of pragmatics*, 33(9), 1361-1390.
- Mushin, I. (2013). Making knowledge visible in discourse: Implications for the study of linguistic evidentiality. *Discourse studies*, 15(5), 627-645.
- Mushin, I. (2013). Making knowledge visible in discourse: Implications for the study of linguistic evidentiality. *Discourse studies*, 15(5), 627-645.
- Nagel, J. (2012). Intuitions and experiments: A Defense of the case method in epistemology. *Philosophy and Phenomenological Research*, 85(3), 495-527.

- Neuman, W. L., & Robson, K. (2014). *Basics of social research*. Toronto: Pearson Canada.
- Nor, N. F. M., & Aziz, J. (2010). Discourse Analysis of Decision Making Episodes in Meetings: Politeness theory and Critical Discourse Analysis. *3L: Southeast Asian Journal of English Language Studies*, 16(2).
- Nuyts, J. (1999). Epistemic modality, language, and conceptualization. *John Benjamins*.
- Nuyts, J. (2000). Tensions between discourse structure and conceptual semantics: The syntax of epistemic modal expressions. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 24(1), 103-135.
- Nuyts, J. (2006). Modality: Overview and linguistic issues. *The expression of modality*, 126.
- O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of educational research*, 78(1), 33-84.
- O'Donnell, M. (2008). UAM corpus tool. *Universidad Autónoma de Madrid*. Retrieved from www.wagsoft.com/CorpusTool.
- O'Donnell, M. (2012). Appraisal analysis and the computer.
- O'Donnell, M. (2012, July). Transitivity development in Spanish learners of English. *39th International Systemic Functional Linguistics Conference*.
- O'Sullivan, M., Martin, J., & Murray, E. (2000). Students' perceptions of the relative advantages and disadvantages of community-based and hospital-based teaching: a qualitative study. *Medical education*, 34(8), 648-655.
- Oswalt, R. L. (1986). The evidential system of Kashaya.
- Ozturk, O., & Papafragou, A. (2008). The acquisition of evidentiality in Turkish. *University of Pennsylvania Working Papers in Linguistics*, 14(1), 23.
- Ozturk, O., & Papafragou, A. (2016). The acquisition of evidentiality and source monitoring. *Language Learning and Development*, 12(2), 199-230.
- Papafragou, A. (2006). Epistemic modality and truth conditions. *Lingua*, 116(10), 1688-1702.
- Peyralans, N. 2019. Saudi Arabia in the US News: Appraisal Theory Applied. (Master's dissertation, *University of Birmingham*).
- Popescu, C. M., Duță, O. A., Marín-Arrese, J. I., Lavid-López, J., Carretero, M., Domínguez Romero, E., ... & Pérez Blanco, M. (2017). Presumptive in Romanian language, an evidential and/or epistemic marker. *Evidentiality and modality in European languages*, 33-55.
- Precht, K. (2003). Stance moods in spoken English: Evidentiality and affect in British and American conversation. *Text & talk*, 23(2), 239-257.

- Reisner, A. (2008). Weighing pragmatic and evidential reasons for belief. *Philosophical Studies*, 138(1), 17-27.
- Riggs, W. D. (2002). Reliability and the Value of Knowledge. *Philosophy and Phenomenological Research*, 64(1), 79-96.
- Rock, F. (2017). An Introduction to Forensic Linguistics: Language in Evidence. *Language and Law/Linguagem e Direito*, 4(1), 161-164.
- Rubin, D. C. (2006). The basic-systems model of episodic memory. *Perspectives on psychological science*, 1(4), 277-311.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185-211.
- Sbisà, M. (2014). Evidentiality and illocution. *Intercultural Pragmatics*, 11(3), 463-483.
- Schurz, G., & Werning, M. (2009). Introduction to Reliable Knowledge and Social Epistemology-The Philosophy of Alvin Goldman. *Grazer Philosophische Studien*, 79(1), 7.
- Shappeck, M. (2004). Pragmatics: An Introduction. *Language*, 80(1), 183-184.
- Sidnell, J. (2012). "Who knows best?": Evidentiality and epistemic asymmetry in conversation. *Pragmatics and Society*, 3(2), 294-320.
- Sidnell, J. (2012). Declaratives, questioning, defeasibility. *Research on Language & Social Interaction*, 45(1), 53-60.
- Sidnell, J., & Enfield, N. J. (2012). Language diversity and social action: A third locus of linguistic relativity. *Current Anthropology*, 53(3), 302-333.
- Simon-Vandenberghe, A. M., White, P. R., & Aijmer, K. (2007). Presupposition and 'taking-for-granted. mass communicated political arguments: An illustration from British, Flemish and Swedish political colloquy', *Lauerbach, E. and A. Fetzer (eds)*, 31-74.
- Sperber, D. (1997). Intuitive and reflective beliefs. *Mind & Language*, 12(1), 67-83.
- Sperber, D., & Wilson, D. (1997). Remarks on relevance theory and the social sciences.
- Sperber, D., Cara, F., & Girotto, V. (1995). Relevance theory explains the selection task. *Cognition*, 57(1), 31-95.
- Squartini, M. (2008) Lexical vs. grammatical evidentiality in French and Italian. *Linguistics* 46 (5): 917-947.
- Stivers, T., & Sidnell, J. (Eds.). (2012). *The handbook of conversation analysis*. John Wiley & Sons.
- Tiersma, M. P. (1999). *Legal Language*. University of Chicago Press.

- Tiersma, M. P. 2003. The Creation, Structure, and Interpretation of the Legal Text. <http://www.languageandlaw.org/LEGALTEXT.HTM> (accessed October 15, 2016).
- Tiersma, P. M. (1999). *Legal language*. University of Chicago Press.
- Tindall-Ford, S., Chandler, P., & Sweller, J. (1997). When two sensory modes are better than one. *Journal of experimental psychology: Applied*, 3(4), 257.
- Triki, M. (2014). Cross-cultural pragmatics for bilateral interpreter training. In S. Najjar-Zerei (Ed.), *Proceedings of the international conference on Text and context. High Institute of Languages, University of Gabes*.
- Triki, M. (2021). Persuasion Versus Manipulation: The Input of Pragmatics and CDA. *Arabic Language, Literature & Culture*, 6(4), 77.
- Triki, M. (2022). Evidentiality as Forensic Linguistic tool: The Politics of reporting at court. *Cahier in Image: études sémiotique et analyse du discours*, 71-83.
- Triki, M., & Sellami-Baklouti, A. (2002). Foundations for a course on the Pragmatics of Discourse. *Imprimerie Reliured'Art*.
- Triki, M., & Triki, N. The Interface of SFL and Pragmatics.
- Trosborg, A. (1997). *Rhetorical Strategies in Legal Language: Discourse Analysis of Statutes and Contracts*. Gunter Narr Verlag.
- Ünal, E., & Papafragou, A. (2020). Relations between language and cognition: evidentiality and sources of knowledge. *Topics in Cognitive Science*, 12(1), 115-135.
- Van Dijk, T. A. (1998). *Ideology: A Multidisciplinary Approach*. London: Sage Journal.
- Van Dijk, T. A. (2006). Discourse and manipulation. *Discourse & society*, 17(3), 359-383.
- Van Dijk, T. A. (2008). Critical discourse analysis and nominalization: Problem or pseudo-problem?. *Discourse & Society*, 19(6), 821-828.
- Van Dijk, T. A. (2015). Critical discourse analysis. *The handbook of discourse analysis*, 466-485.
- Van Djik, F., Boula-Picard, R., Parillaud, O., Enard, A., Plaze, J. P., Fourdin, C., & Vodjdani, N. (2004, October). Ku-band microwave optical emitter based on a directly modulated DFB laser. *2004 IEEE International Topical Meeting on Microwave Photonics (IEEE Cat. No. 04EX859)* (pp. 259-261). IEEE.
- Vandenberg, A. M. (1992). The interactional utility of of course in spoken discourse. *Occasional Papers in Systemic Linguistics*, 6, 213-226.
- Vass Ward, H. (2015). *A Comparative Analysis of Hedging in a Corpus of Two Written Legal Discourse Genres (Doctoral dissertation)*.
- Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for specific purposes*, 20(1), 83-102.

- Viberg, Å. (1983). The verbs of perception: A typological study.
- Vogel, F., Hamann, H., & Gauer, I. (2018). Computer-assisted legal linguistics: Corpus analysis as a new tool for legal studies. *Law & Social Inquiry*, 43(4), 1340-1363.
- Ward, H. V. (2015). A Comparative Analysis of Hedging in a Corpus of Two Written Legal Discourse Genres. *Universidad Politécnica de Madrid*.
- Weiss, G., & Wodak, R. (Eds.). (2007). Critical discourse analysis. *Palgrave Macmillan*.
- White, B. A., & Kistner, J. A. (2011). Biased self-perceptions, peer rejection, and aggression in children. *Journal of abnormal child psychology*, 39(5), 645-656.
- White, D. (2017). Affect: an introduction. *Cultural Anthropology*, 32(2), 175-180.
- White, E. V., & Gatersleben, B. (2011). Greenery on residential buildings: Does it affect preferences and perceptions of beauty?. *Journal of environmental psychology*, 31(1), 89-98.
- White, P. (2015). The Appraisal Website.
<http://www.grammatics.com/appraisal/appraisalguide/framed/frame.htm> accessed on Jan. 30, 2019.
- Whitt, R. J. (2010). Evidentiality and perception verbs in English and German.
- Whitt, R. J. (2010). Evidentiality, polysemy, and the verbs of perception in English and German. *Linguistic realization of evidentiality in European languages*, 49, 249.
- Whitt, R. J. (2011). (Inter) Subjectivity and evidential perception verbs in English and German. *Journal of Pragmatics*, 43(1), 347-360.
- Willett, T. (1988). A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 12(1), 51-97.
- Wodak, R. (1987). 'And where is the Lebanon?' A socio-psycholinguistic investigation of comprehension and intelligibility of news. *Text-Interdisciplinary Journal for the Study of Discourse*, 7(4), 377-410.
- Wodak, R. (2006). Mediation between discourse and society: Assessing cognitive approaches in CDA. *Discourse studies*, 8(1), 179-190.
- Wodak, R. (2006). Mediation between discourse and society: Assessing cognitive approaches in CDA. *Discourse studies*, 8(1), 179-190.
- Wodak, R. (2007). Pragmatics and critical discourse analysis: A cross-disciplinary inquiry. *Pragmatics & cognition*, 15(1), 203-225.
- Yang, J. B., & Xu, D. L. (2013). Evidential reasoning rule for evidence combination. *Artificial Intelligence*, 205, 1-29.

- Yıldız, M. (2018). An analysis of evidentiality in elt dissertation discussions by native and non-native english writers (*Doctoral dissertation*).
- Zagzebski, L., & Craig, E. (1998). Virtue epistemology.
- Zhenhua, W. (2016). Legal discourse: An introduction. *Linguistics and the Human Sciences*, 12(2-3), 95-99.
- Zienkowski, J., Verschueren, J., & Östman, J. (2011). Discursive pragmatics: A platform for the pragmatic study of discourse. *Discursive Pragmatics*. John Benjamins Publishing Company.

Appendices

Appendix A: Evidential and Affect markers

A.1 Evidential Markers

Table A.1: Chafe's (1986) and Ifantidou's (2001) Taxonomies

Mode of knowing	Belief	Induction	Sensory	Hearsay	Deduction
Evidential markers	think thought guess guessed suppose supposed suspect suspected know knew In my opinion remember remembered recall recalled recollect recollected believe believed	Must Obvious Evidently Presumably must have	See saw look looks looked seem seemed seems notice noticed hear heard sounds sounded feel feels felt taste tastes tasted smell smells smelt	Tell tells told say says said hear hears heard Supposed to Apparently apparent Reported reportedly Alleged allegedly	Should Presumably Can Could Would May Perhaps Might Possible possibly Probably guess

1.2 Biber and Finegan's Affect Markers

Table A.2: The Adopted Biber and Finegan's Taxonomy of Affect Markers (1989, pp. 120-122)

Affect basic types	Positive	Negative
Affect Markers	Adverbs Amazingly Amusingly Appropriately Astonishingly Conveniently Curiously Enchantingly Fortunately Funnily Happily	Adverbs Alarmingly Annoyingly Ashamedly Depressingly Disappointingly Disgustingly Disturbingly Embarrassedly Frighteningly Impatiently

	<p>Hopefully Incredibly Inevitably Interestingly Ironically Luckily Mercifully Naturally Predictably Preferably Refreshing Remarkably Rightly Significantly Surprisingly Thankfully Unaccountably Understandably Unexpectedly</p> <p>Verbs Ache for Enjoy Fancy Hope Like Long for Love Prefer Relish Seek Want Wish Yearn Amazes Amuses Astonishes Delights Interests Pleases Refreshes Suits Surprise thrills</p> <p>Adjectives Amazed Amused Astonished Content Curious Delighted</p>	<p>Oddly Perplexingly Regretfully Sadly Shockingly Strangely Suspiciously Tragically Unfortunately Unhappily Unlikely Unnaturally</p> <p>Verbs Begrudge Can't stand Deign Despise Detest Dislike Dread Envy Fear Hate Loathe Regret Resent Scorn Aggravates Agitates Alarms Annoys Bothers Confuses Disappoints Discourages Disgusts Dismays Distresses Disturbs Embarrasses Frightens Horridifies irritates Kills Overwhelms Pains Perplexes Perturbs Puzzles Rubs Saddens</p>
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	<p>Eager Enchanted Fascinated Fortunate Glad Happy Hopeful Interested Jubilant Keen Lucky Overjoyed Pleased Proud Relieved Satisfied Surprised Thankful Amazing Amusing Appropriate Astonishing Convenient Curious Delightful Fascinating Fitting Fortunate Funny Incredible Inevitable Interesting Ironic Lucky Merciful Natural Nice Pleasing Predictable Preferable Proper Refreshing Remarkable Significant Surprising Understandable unexpected</p>	<p>Scares Shocks Slays Troubles Upsets Worries Adjectives Afraid Aggrieved Alarmed Annoyed Ashamed Concerned Depressed Disappointed Disgusted Dismayed Dissatisfied Distressed Embarrassed Frightened Furious Impatient Indignant Irritated Mad Odd Overwhelmed Perplexed Perturbed Puzzled Regretful Sad Scared Shocked Suspicious Unhappy Upset Worried Alarming Annoying Confusing Disappointing Disgusting Distressing Disturbing Embarrassing Frightening Hopeless Horrible</p>
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		Improper Irritating Odd Perplexing Puzzling Regrettable Sad Scary Silly Strange Suspicious Terrible Tragic Unfortunate Unnatural Upsetting Worrisome
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Table A.3: Belief Evidential Markers

Evidential markers of belief	Conveyance (usage)	Examples	Reference
I think	Expression of a thought.	I think that people around the world misunderstood Islam.	(Chafe, 1986, p. 266)
I guess	Expression of speculation.	John is in Canada now, I guess.	(Chafe, 1986, p. 266)
I suppose	Expression of supposition.	Friendship is more precious than love, I suppose.	(Chafe, 1986, p. 266).
I suspect	Expression of doubt in something/ someone.	I suspect that John and Marry are preparing a plan to make Joe resign.	(Ifantidou 1994, p. 16)
I know	Expression of having knowledge (evidence / direct experience).	I know that Covid-19 epidemic got bigger size than it should because of social media.	(Ifantidou, 1994, p. 16)
In my opinion	Expression of speaker's opinion/suggestion.	In my opinion, Covid-19 is a disease that psychologically disturb people.	(Aikhenwald, 2007, p. 216)
I remember	Expression of having a memory in mind about an ancient experience/ witness of an event/ a piece of information.	I remember John's first prize in chess in college.	(Ifantidou, 1994, p. 16)
I recall	Expression of the act of remembering a detail from speaker's memory.	Marry got married in March, I recall.	(Ifantidou, 1994, p. 16)

I recollect	Expression of the act of remembering a detail from speaker's memory.	I recollect that John had psychological issues after being kidnapped.	(Ifantidou, 1994, p. 16)
I feel	Expression of knowledge/thought based on an inner state (prediction).	I feel that John is more to be bipolar than schizophrenic.	(Whitt, 2010, p. 31)
I see	Expression of having belief in a piece of information.	I see that people should be differently treated.	(Whitt, 2010, p. 219)
I believe	Expression of having inner reason(s) to be convinced of a piece of information.	I believe that people shouldn't be similarly treated.	(Ifantidou, 1994, p. 114)

Table A.4: Evidential Markers of Induction

Evidential markers of induction	Conveyance (usage)	Examples	References
Must	Expression of necessity, obligation and inference. High degree of reliability/ probability	John must be at the airport now.	Chafe, 1986, p. 267 also Ifantidou, 2010, p. 6
Obvious	Expression of high reliable probability. Equal reliability to must	It is obvious that the author is not an English native speaker.	Chafe, 1986, p. 267
Evidently	Expression of high reliable probability.	Evidently, they follow a therapy.	Chafe, 1986, p. 267
Presumably	Expression of supposition with evidence.	Presumably, he is capable of teaching 'A' levels.	Ifantidou, 2010, p. 6
must have	Expression of positive assumption.	John must have arrived.	Anderson, 1986, p.274 also Ifantidou, 2010, p. 6

Table A.5: Sensory Evidence Markers

Evidential markers of sensory	Conveyance (usage)	Examples	References
I see	The expression of a an visual phenomenon that could metaphorically be used to mean perceive.	I see her coming down the hall.	Chafe, 1986, p. 267

X looks	The expression of a an visual phenomenon that could be used as inferential marker.	she looks after her mother	/
I hear	The expression of a an auditory phenomenon that could be used as hearsay markers.	I hear John’s dog barking every morning.	/
X sounds	The expression of a an auditory phenomenon that could be used as inferential marker.	He sounds like he’s mad.	/
I feel	The expression of a an Tactile phenomenon that could be used as belief marker of Thought.	I feel something crawling up my leg.	Chafe, 1986, p. 267
X feels	The expression of a an tactile phenomenon that could be used as inferential marker.	It feels like no one is interested in the lecture.	Ifantidou, 2001, p. 6
I taste	The expression of a an gustative phenomenon that could be used as methaphorically marker.	I can taste that there’s garlic in this soup	Whitt, 2010, p. 8
X tastes	The expression of a an gustative phenomenon that could metaphorically be used.	It tastes good	Ifantidou, 2001, p. 5
I smell	The expression of a an olfactory phenomenon that could metaphorically be used.	I’m <u>smelling</u> a rat	Ifantidou, 2001, p. 5
X smells	The expression of a an olfactory phenomenon that could metaphorically be used.	It <u>smells</u> roasted chicken	Ifantidou, 2001, p. 5

Table A.6: Hearsay and Reporting Evidential Markers

Evidential markers of hearsay	Conveyance	Examples	Reference
I’ve been told	Expression of a reception of a verbiage.	I’ve been told that Biden is the president of U.S.A.	Mithun, 1986, p. 89
X says	Expression of a reception of a verbiage, that imply a moderate level of responsibility.	Donald Trump says the presidential elections are not honest.	/
X told me	Expression of a reception of a verbiage, that imply a moderate level of responsibility.	Jane told me that politicians must be good liars.	Mithun, 1986, p. 89
X said	Expression of a reception of a verbiage, that imply a moderate level of responsibility.	Jane says politicians must be good liars.	/

I heard	Expression of a reception of a verbiage.	“I heard that John crossed the street”	Ifantidou, 2001, p. 6
It seems	Expression of a reception of a verbiage, that imply a moderate level of reliability.	“well Schaffer it seems had just had found the least article from the Smithsonian”.	Chafe, 1986, p. 268
Supposed to	Expression of a reception of a verbiage, or inference that imply a moderate level of reliability.	Joe Biden is supposed to be the President of the States (hearsay).	Chafe, 1986, p. 268
Apparently/apparent	Expression of a reception of a verbiage, that imply a moderate level of responsibility and reliability.	Politicians are apparent/apparently good liars.	Ifantidou, 2001, p. 6
Reported/reportedly	Expression of a reception of a verbiage, that imply a moderate reliability level	Casa del Papel is reported/ reportedly the best series on Netflix and most watched one.	Ifantidou, 2001, p. 6
Alleged/allegedly	Expression of a reception of a verbiage that imply a moderate reliability level	Trump is alleged/ allegedly a bad loser.	Aleksić, 2016, p. 200
X is said	Expression of a reception of a verbiage, that imply a moderate level of responsibility.	He is said to have done it.	Ifantidou, 2001, p. 6
X is reputed	Expression of a reception of a verbiage. that imply a moderate level of responsibility.	He is reputed to be very well-educated.	Ifantidou, 2001, p. 6

Table A.7: Deductive Evidential Markers

Evidential markers of deduction	Conveyance (usage)	Examples	Reference
Presumably	Expression of deduction.	Adults presumably are capable of purely logical thought.	Chafe, 1986, p. 270
Perhaps	Expression of deduction.	Dogs are perhaps emotionally more sensitive than cats.	Yang, 2014, p. 586
Probably	Expression of deduction.	Dogs are probably emotionally more sensitive than cats.	Yang, 2014, p. 586
I guess	Expression of deduction	I guess dogs are emotionally more sensitive than cats.	Mithun, 1986,p. 89
Must have been	Expression of deduction by necessity.	There must have been people in that house.	Mithun, 1986,p. 89

I deduce	Expression of deduction.	The percentage of poverty in Mexico is 10 times the percentage of poverty in the U.S., I deduce.	Ifantidou, 2001, p.6
So	Expression of deduction.	So, politicians are the most untrustworthy people.	Ifantidou, 2001, p.6
X seem(s)	Expression of deduction.	It <u>seems</u> that Mary found the body.	Dixon, 2005, p. 23

Appendix B: Annotated evidential expressions

The expressions containing evidentials are listed in this appendix.

Table B.1: Samples of Thought expressions in the Letter

Segments	Belief Evidential Marker	Information (belief expressed)
	Thought (Mental Process)	Information as thought
<u>Questioning</u>	thought think (x10)	<p>I would not be the first to say that I think Facebook could do better at each of those things, but in fairness, But I think your answer was very careful.</p> <p>I thought that information collected by FB or an App, would be general, telling something like guys preferred black ties with polka dots so manufacturers could make them and sell them like hot cakes.</p> <p>I think that the basic question is: "What is the potential impact of having this data stolen?"</p> <p>I think social media is disastrous for personal privacy and consider Facebook to always have been the worst offender.</p> <p>I think the only thing I can think to ask is "Why?"</p> <p>I think the solution to the opioid question you mentioned earlier of doing more with automated tools will lead to both faster response times and more accurate enforcement of the policies.</p> <p>I think while I applaud some of the reforms that you're putting forward, the underlying issue here is that your platform has become a mix of news, entertainment, social media, that is up for manipulation.</p>
<u>Answering</u>	Think (7)	<p>We also think it's important for people to be able to see the other ads a Page is running, even if they're not directed at them. we also think it's important to give people access to their own information, which we do through our Download Your Information and Access Your Information tools, Activity Log, and Ad Preferences, all of which are accessible through our Privacy Shortcuts tool. (6)</p>

Table B.2: Samples of Thought expressions in Hearings' Transcripts

Segments of Hearings' Transcripts	Thought evidential markers	Thought expressions
Committee Questioning Statements	<p>My point In my opinion To my mind (2) It is my understanding in my view. Just my opinion. our understanding and our view is that In my opinion (4) my understanding (4) in my mind, Think (184) found considered</p>	<p>I think you are genuine. in my opinion, this is the most - this is the most intense public scrutiny I've seen for a tech-related hearing since the Microsoft hearing that - that I chaired back in the late 1990s. I haven't printed that on my card yet, I - I will - will say that, but I think we have that account as well I think about 140 million Americans get their news from Facebook To my mind, the issue here is transparency. Mr. Zuckerberg, I think we all agree that what happened here was bad. I think the point has been well made that people really have no earthly idea of what they're signing up for.</p>
Witness Responding Statements	<p>viewed feel do think (5) consider 'm afraid imagine thought feel I've always seen Thought would think do think (2) see (2) do imagine</p>	<p>When I was starting Facebook I had one choice of an internet service provider. I think Facebook is safe. I think everyone in the world deserves good privacy protection. I think, as a general principle, I think protecting minors and protecting their privacy is extremely important, and we do a number of things on Facebook to do that already, So even though we didn't do it, I think we have a responsibility to be able to prevent that and be able to take action sooner.</p>

Table B.3: Samples of Conviction (belief) expressions in the Letter

Segments of the Letter	Conviction evidential markers	belief expressions
Questions part	Our approach belief (5) Believe (333)	<p>we believe industry should follow and promote when building and deploying AI systems.</p> <p>We believe that everyone has the right to expect strong protections for their information, and that we also need to do our part to help keep our community safe, in a way that's consistent with people's privacy expectations.</p> <p>We believe that tech companies, media companies, newsrooms, and educators all need to work together to address this societal problem. I believe there have been other instances of privacy not being taken seriously.</p>
Answers part		<p>We believe that it's important to communicate with people about the information that we collect and how people can control it. (78)</p> <p>We believe giving people more context can help them decide what to trust and what to share. 23</p> <p>We believe it's important to amplify the good effects of social media and mitigate the bad-to</p> <p>We believe everyone deserves good privacy controls</p> <p>Facebook believes that people should be able to easily understand why they are seeing ads, who paid for them, and what other ads those advertisers are running. 18</p> <p>We believe everyone deserves good privacy controls. (101)</p> <p>We believe that adding voices to the conversation creates a richer and more vibrant community.5</p> <p>(Because I personally believe Facebook was, and continues to be, exploited by bad actors.3</p> <p>We also believe the ads you see across the Facebook family of apps and services should be useful and relevant to you. (17)</p>

Table B.4: Samples of Conviction (belief) expressions in Hearings' Transcripts

<u>Belief Evidential Marker</u>		<u>Information (belief expressed)</u>
<u>Verb (Mental Process)</u>	<u>Phrase Adverb</u>	<u>Object (Phenomenon)</u>
<u>Committee</u>	I come from the background of believing Deeply have more confidence believe (50) <u>do believe (5)</u> <u>am convinced</u>	I Believe this is extraordinarily important. I believe it's important to tell people exactly how the information that they share on Facebook is going to be used. I believe you have all the talent. I believe we need to have laws and rules that are sophisticated as the - the brilliant products that you've developed here. We believe that it is entirely possible that there will be a connection there. I believe you use it to reassure users I believe Facebook is an American company I believe we have served the like button on pages more than that, I am convinced that there are other people out there. I do believe that was the intention and objective of your company I do believe you perform it very, very well in a lot of ways.
<u>Witness Responding statements</u>		I believe that you should have complete control over your data. again, I believe that you already have that control. I believe we do link people's accounts between devices in order to make sure that their Facebook and Instagram and their other experiences can be synced between their devices. We believe that everyone around the world deserves good privacy controls. I believe all of your information is in that file. I come from the background of believing that everything I do I assume is opened for anybody to take when I am on the internet.

Table B.5: Samples of knowledge expressions in Hearings' Transcripts

Belief Evidential Marker		Information (belief expressed)
Verb (Mental Process)	Phrase Adverb	Object (Phenomenon)
<u>Committee questioning Statement</u>	Where we find evidence that from this experience have been aware (30) know (52) am familiar	we know what information goes in the algorithm and what comes out, The case I am familiar with was attempting to advertise American flags. we know that Facebook has information about users that those users did not "put in," such as photos of users posted by Facebook friends or web logs. We know Facebook uses contact information to suggest people users can connect to. We now know that fake accounts were part of Russia's manipulation of the 2016 election. we know from this experience that just because a company should do something they won't unless it A: makes them more money or B: is required by law.
<u>Witness Responding Statements</u>		Facebook's security team has been aware of traditional Russian cyber threats for years and has... We know that measurement done right helps organizations make smart decisions about the choices they face-rather than simply relying on anecdote or intuition. In the past, we have been aware of scraping as an industry issue, and have dealt with specific bad actors previously. (4) We know people sometimes might not like the information others have shared, so we provide a number of tools to notify and help people resolve concerns. We know the chances of finding a missing child increase when more people are on the lookout,

Table B.6: Samples of Knowledge expressions in Hearings' Transcripts

Segments of the Hearings Transcripts	<u>Knowledge Evidential Marker</u>	<u>Knowledge expressions</u>
	<p>it's also the reality - to our current knowledge for convenience Know (30) we discover remember am aware of (2) do know (2)</p>	<p>I know Facebook has taken several steps, and intends to take more, to address these issues. We know Cambridge Analytica improperly accessed some information about millions of Facebook members by buying it from an app developer. But it's also the reality that Facebook is a for-profit entity that generated \$40 billion in ad revenue last year by targeting ads. I know other countries are, and they're putting laws in place. I know you have heard from many, yesterday and today, about concerns regarding Facebook censorship of content, I Know that you have since -- or Facebook has since declared, no, that was a mistake, an algorithm problem that went on there. Here is what I do know: You have trackers all over the web. I am aware of two class action lawsuits that Facebook has settled relating to privacy concerns.</p>
<u>Witness Responding statements</u>		<p>I know we try to delete it as quickly as is reasonable. I know you've employed some new algorithms to target bots, bring down fake accounts, deal with terrorism, things that you've talked about in this hearing. I know we try to delete it as quickly as is reasonable. we know that Al Shabaab, al-Qaida, ISIS has used social media like we could not even imagine. we know that there are issues with content like this that we need to do more proactive monitoring for.</p>

Table B.7: Samples of Induction expressions in the Letter

Segments of the Letter	Induction Evidential Marker	Information (inference expression)
Question	obviously (2)	<p>This is obviously a serious allegation. Obviously, Facebook cannot address all instances of bias.</p>

Table B.8: Samples of Deduction expressions in the Letter

Segments of the Letter	Deduction Evidential Marker	Information (inference)
	Appear may	these apps appear to be linked to AIQ, which was affiliated with Cambridge Analytica. (4) And even with an audit, it may not be possible to determine conclusively what data was shared with Cambridge Analytica or whether it retained data after the date it certified that data had been deleted.
	appear (3) Apparently (2) seemed (2) seems (3) it doesn't seem It's clear to me presumably	Apparently, Facebook's algorithm change may have resulted in intentional or unintentional censoring of certain types of information and news. You seemed to misunderstand my questions, so I'm asking them again to get better answers from you. It seems like each time a problem is fixed, a new one appears. Whatever process is in place, it doesn't seem to be working. It's clear to me that using all that data was the whole point, no matter what Facebook claims. The Facebook application is presumably going to evolve, it seems clear that a sizable percentage of your user population lacks the cognitive abilities, skills and training necessary for successful self-protection online. Apparently when I previously used the phone I was reviewing friend posts in Facebook.

Table B.9: Samples of Induction expressions in Hearings' Transcripts

Segments in the Hearings' Transcripts	Induction Evidential Marker	Information (inference)
Committee Opening statement	Clearly obviously	While the contours of the Cambridge Analytica situation are still coming to light, there was clearly a breach of consumer trust and a likely improper transfer of data. There's obviously a great deal of interest in this subject.
Witness Opening statement	it's clear clearly	But it's clear now that we didn't do enough to prevent these tools from being used for harm. it was clearly a mistake to believe them ...
Witness Responding statement	Clearly (2)	They clearly do. If they are illegal, they clearly violate your policy. that clearly sounds like a big issue and something that would violate our policies.
	obviously (10) brought to my attention So, s clear now obvious Something was must Clearly	And the - the information, obviously , is an important commodity and it's what makes your business work. Obviously Facebook has been done considerable reputational damage by it's association with Aleksandr Kogan and with Cambridge Analytica , which is one of the reasons you're having this enjoyable afternoon with us. I want to ask you about privacy and democracy, because I think, obviously , those are linked. advertisers clearly end up having access to that through agreements with you about how they then target ads to me, to you, to any other user.

Table B.10: Samples of Deduction expressions in Hearings' Transcripts

Segments of the Hearings' Transcripts	Deduction Evidential Marker	Information (inference)
Committee opening statement	Don't appear Appear Should so so Probably (5) seems	these two incidents <u>is</u> that they don't appear to be caused by the kind of negligence that allows typical data breaches to happen. Instead they both appear to be the result of people exploiting the very tools that you created to manipulate users' information. This should be a wake-up call for the tech community. So the effectiveness of these social media tactics can be debated.
Witness responding statement	s unlikely to be appear (3) should (2) appears (2) cannot be So (4) Probably (6) may be guess (4) seem (4) assume (6)	So , now, we have to go through our - all of our relationship with people and make sure that we're taking a broad enough view of our responsibility. if I had to pay extra in order to make it so that my app could potentially be seen or used by other people, then - then we probably wouldn't be here today. If we'd done it a couple of years earlier, then we probably wouldn't be sitting here today.
Committee questioning statement	So you clearly Apparently (2) will have to be I would imagine (3) seems (12) perhaps (3) I also observe	so , therefore, you consider my personally identifiable data the company's data, not my data. I would guess that it would be somewhat different, because we have somewhat different sensibilities in the U.S. as to other countries. <u>it seems</u> to me that everything you can do to lean over backwards to make sure that you are fair in protecting political speech, right or left, that you ought to do it. I imagine there will have to be a number...

Table B.11: Samples of Sensory expressions in the Letter

Segment of the Letter	Expresser (Senser)	Sensory Evidential Marker	Object (Phenomenon/Action)
Question part	we	've seen	We've seen that with a foreign actor.
Answer part	we	saw	What we saw early in the 2016 campaign cycle followed this pattern. (x19)
	we	started to see	we started to see new kind of behavior from APT28-related accounts-namely, the creation of fake personas that were then used to seed stolen information

Table B.12: Samples of Sensory expressions in Hearings' Transcripts

Segment of the Letter	Expresser (Senser)	Sensory Evidential Marker	Object (Phenomenon/Action)
Visual Sensory Evidential Expressions			
witness-opening-	we	've seen	we've seen the "Me Too" movement.
Committee-questioning-statement	We	've seen	We've seen the apology tours before.
			I've always seen technology as a promise to democratize our nation, expand access, expand opportunities. But unfortunately, we've also seen how platforms,..
	I	have seen	Facebook conducted a couple of years ago an effort in our district in Houston for our small businesses, and it was one of the most successful outreach I have seen.
	we	saw	but every time we saw what precautions you have or, in most cases, have not taken your company is caught unprepared ... We saw a large telecommunications company become a near-monopoly in the sixties, seventies, and eighties.
	we	are seeing	and now we are seeing around the globe an enhanced recruitment of women, as well, to join ..
Witness-responding-statement	I	view	I view us as a tech company because the primary thing that we do is build technology and products.
			the intent of what we're trying to get at is the foreign election interference we've seen has taken more... we saw, generally, a bunch of app developers who were...
Auditory Sensory Evidential Expressions			
Committee questioning statement		that sounds	that sounds really good to me.
Witness-responding-statement		it sounds	it sounds like we made a mistake

Table B.13: Samples of Hearsay expressions in Letter

Segments of the Letter	Hearsay evidential Marker	Information
Questions part	Demonstrates Said (5)/often hear stated (2)/posted described (2) explained/quote (5) acknowledged at the hearing (5) explains has been stated demonstrated were asked asked/have reported/referred (2) has claimed published(5) referred (2) announced(3)published	At the April 11 hearing, it was revealed that Facebook's 2 billion users likely had their public profiles scraped In a March 21, 2018 Facebook post, you stated that Facebook will ban any developer from the... You stated during questioning that you believe the improper release of user information to Cambridge Analytica did not violate the 2011 consent decree You've promised that when Facebook discovers other apps that had access to large amounts of user data, you will ban them and tell those affected. on February the 16th, Special Counsel Mueller issued an indictment against the Russia-based Internet Research... Through this 37-page indictment, we learned that the IRA ran a coordinated campaign through 470 Facebook accounts
Answers part	reporting certified that (3) certified to /indicate (2) indicated 's noted/talked Claim/testified Alleged/have been informed provided written confirmation (5) learned from press (6) represented that provided written confirmation to Facebook	Kogan represented that, in addition to providing data to his Pro-sociality and Well-Being Laboratory at the University of Cambridge for the purposes of research, GSR provided some Facebook data to SCL Elections On April 3, 2017, Alexander Nix, on behalf of SCL, certified to Facebook, that it deleted the information that it received from GSR or Kogan. On January 18, 2016, Cambridge Analytica provided written confirmation to Facebook that it had deleted the data received from Kogan and that i... On August 16, 2016, Eunoia (executed by Eunoia Founder Christopher Wylie) certified that it deleted ... On June 11, 2016, Kogan executed signed certifications of deletion on behalf of himself and GSR.

Table B.14: Samples of Hearsay expressions in Hearings' Transcripts

Segments of the Letter	Hearsay evidential Marker	Hearsay Expressions
Committee opening statement	have described 've said 've promised says mentioned these stories touch on said says	on February the 16th, Special Counsel Mueller issued an indictment against the Russia-based Internet You've promised that when Facebook discovers other apps that had access to large amounts of user data, you will ban them and tell those affected. Professor Koganis said to have taken data from over 70 million Americans. It has also been reported that he sold this data to
Witness opening statement	spoke about talked about said/ve said ve talked about confirmed/quote article showed, alleges/said sent out a notification said argue ve been hearing 've heard mentioned 've read talks about	we first contacted Cambridge Analytica, they told us that they had deleted the data. your chief operating officer, Ms. Sandberg, suggested on the NBC "Today Show" that Facebook users ... you spoke very idealistically about your company, and you talked about the strong values, and you said you ... According to press reports , my home state of Wisconsin was a major target of Russian-bought ads on Facebook... I'm concerned that press reports indicate Facebook learned... The digital director for that campaign for 2012 described the data-scraping app as something that would,... and you say, "I only want my friends to see it," And then a month ago we heard a new report that said that they actually hadn't done that. They told us at that point that they had done that. we have all heard about, basically folks who don't have an ideological goal.

Appendix C: Annotated Affect expressions

This part gathers the tables of annotated affect expressions.

Table C.1: Samples of Satisfaction Expressions

FILE	SATISFACTION EXPRESSION
Texts/Letter.txt	<p>Since the hearing, I have been informed by Facebook employees that the company does block child pornography at the point of upload, which I applaud.</p> <p>I appreciate the fact that you are hiring thousands of more people to assist on these fronts.</p> <p>Thank goodness I deleted my account several years ago.</p> <p>Two family members work for you and believed in your goodness.</p> <p>Today's hearing is extraordinary.</p>
Texts/Transcript .txt	<p>It's even more extraordinary to have a single CEO testify before nearly half of the United States Senate.</p> <p>But then, Facebook is pretty extraordinary.</p> <p>This hearing is an opportunity</p> <p>You have a real opportunity</p> <p>I appreciate</p> <p>Facebook is an idealistic and optimistic company.</p> <p>The good news here is that we already made big changes to our platform in 2014</p> <p>and I'm glad that you all have gotten that message.</p>

Table C.2: Samples of Flattery Expressions

FILE	FLATTERY EXPRESSION
Texts/Letter.txt	
Texts/Transcript .txt	<p>it's my pleasure to recognize the chairman of the Commerce Committee, Chairman Thune,</p> <p>It's even more extraordinary to have a single CEO testify before nearly half of the United States Senate.</p> <p>But then, Facebook is pretty extraordinary.</p> <p>The history and growth of Facebook mirrors that of many of our technological giants.</p> <p>If you and other social media companies do not get your act in order, none of us are going to have any privacy anymore.</p> <p>To my mind, the issue here is transparency.</p> <p>We have - Facebook has participated recently in the fight against scourge - the scourge of sex trafficking.</p> <p>You're a smart guy.</p> <p>You're - you - you can spot me 75 IQ points, if I can figure it out, you can figure it out.</p> <p>I'm not as smart as you are about tech information.</p> <p>So, Mr. Zuckerberg, your expertise in this field is without rival.</p> <p>Facebook has become integral to our lives.</p> <p>People need to know that you are here voluntarily.</p> <p>But I know that Ardsley High School is very proud of you.</p> <p>You know, you are a real American success story.</p>

Table C.3: Samples of Gratitude Expressions

FILE	GRATITUDE EXPRESSION
Texts/Letter.txt	<p>We appreciate the time you gave us to respond to these questions. Thank you for soliciting our questions. Thanks so much for "grilling" him! Thank you for all you do for us. Thank you for this opportunity. Please also thank him for allowing us all to connect worldwide, and share our views, opinions, inspirations, help, assistance, fun and funny items too!</p>
Texts/Transcript .txt	<p>Thank you very much, Mr. Chairman. Thank you, my colleagues and Senator Nelson. Mr. Chairman, thank you. And, Mr. Zuckerberg, thank you for being with us. And I just want to take a moment before I go into this in more detail to thank you for your leadership on this. So I'm - I appreciate that you brought that up. Thank you, my time has expired and I appreciate the courtesy of the chair for the extra seconds. Thank you for your testimony and thank you for your presence here today.</p>

Table C.4: Samples of Being-good Expressions

FILE	BEING-GOOD EXPRESSION
Texts/Letter.txt	<p>While we seek to be a platform for a broad range of ideas, we do moderate content in good faith according to published community standards in order to keep users on the platform safe.. we're making it easier for people to see what apps they use and the information they have shared with those apps. We want people to feel confident that our community welcomes all viewpoints and we are committed to designing our products.. Our mission is to give people the power to build community and bring the world closer together. We want our platform to be a place where people can have authentic conversations about elections and other political topics. Freedom of expression is one of our core values,</p>
Texts/Transcript .txt	<p>But certainly, we're always working on trying to make these controls easier. The principles that you're articulating are the ones that we believe in we would be happy to follow up with you on that as well. Senator, those policies and the principles that you articulated are generally how we view our service already. If there is an eminent threat of harm, we're going to take conservative position on that and make sure that we flag that and understand that more broadly. So I hope that everybody will do whatever they can to help enhance respect for government, including speaking to myself. For most of our existence, we focused on all the good that connecting people can bring. There is absolutely no directive in any of the changes that we make to have a bias on anything that we do.</p>

Table C.5: Samples of Dissatisfaction Expressions

FILE	DISATISFACTION EXPRESSION
Texts/Letter.txt	<p>We are saddened to hear these reports and are investigating this issue.</p> <p>We're deeply saddened when the tools we've developed to help people come together and share experiences with their friends and family are misused.</p> <p>FB failed to protect its users' private data.</p> <p>You've already broken your past privacy promise.</p> <p>In doing so, Kogan and his company violated Facebook's Platform Policies.</p> <p>I had to live with frustrations trying to raise my kids by providing an environment that allowed them to learn and grow and to make mistakes but not be defined by them or made targets.</p> <p>Facebook was aware of the issue for two years.</p>
Texts/Transcript .txt	<p>Some have professed themselves shocked - shocked that companies like Facebook and Google share user data with advertisers.</p> <p>this is an opinion that really disturbs me</p> <p>I just think part of this was when people don't even know that their data's been breached, that's a huge problem.</p> <p>I'm afraid Facebook has come down to the position of trying to carve out exceptions to that.</p> <p>Sounds much more boring.</p> <p>You have told us today - and you've told the world - that Facebook was deceived by Aleksandr Kogan when he sold user information to Cambridge Analytica.</p>

Table C.6: Samples of Insecurity Expressions

FILE	INSECURITY EXPRESSION
Texts/Letter.txt	<p>Of course, we cannot rely on technology alone to keep our community safe.</p> <p>Facebook is invasive and people early on had no idea what they were getting into.</p> <p>One reason that so many people are worried about this incident is what it says about how Facebook works.</p> <p>The idea that for every person who decided to try an app, information about nearly 300 other people was scraped from your service is, to put it mildly, disturbing.</p> <p>The recent revelation that malicious actors were able to utilize Facebook's default privacy settings</p>
Texts/Transcript .txt	<p>the data was failed to be protected.</p> <p>Cambridge Analytica - that had fraudulently obtained all of this information,</p> <p>I know you understand that there is a growing distrust - it's a real serious problem that you are an industry that lacks diversity in a very dramatic fashion</p> <p>Which I think speaks to this lack of trust that we're seeing here, but - and I understand there's some technical issues and logistical issues for that to happen.</p> <p>While Facebook has certainly grown, I worry it may not have matured.</p>

Table C.7: Samples of Blame-of-others Expressions

FILE	BLAME-OF-OTHERS EXPRESSION
Texts/Letter.txt	<p>In each of these assessments, PwC determined that Facebook's privacy controls were operating with sufficient effectiveness to provide reasonable assurance to protect the privacy information covered under the FTC Consent Order, in all material respects. Parents, teachers, social networks, as well as federal and state governments, must address how this technology can hurt innocent people.</p> <p>Facebook does not create or edit the content that our users post on our platform.</p> <p>Facebook considered the matter closed after obtaining written certifications and confirmations from Kogan, GSR, Cambridge Analytica, and SCL declaring that all such data they had obtained was accounted for and destroyed.</p> <p>You knew and did nothing!</p>
Texts/Transcript .txt	<p>Congressman, in retrospect, it was a mistake, and we should have and I wish we had notified and told people about it then.</p> <p>They allowed a foreign company to steal private information from tens of millions of Americans, largely without any knowledge of their own.</p> <p>Had that occurred, we wouldn't be here today talking about Cambridge Analytica.</p> <p>But I can't imagine that it's true as a legal matter that I actually own my Facebook data, because you're the one monetizing it</p> <p>But in general, a lot of the mistakes are around how people connect to each other, just because of the nature of the service.</p> <p>It's hard to say that people fully understand something when it's only written out in a long legal document.</p>

Abstract

The legal discourse surrounding technology companies, particularly social media platforms, has become increasingly important in recent years. One such critical moment was the hearings of the CEO of Facebook at Congress. The transcripts of these hearings provided a unique spoken corpus for analysis. Additionally, the letter forwarded by the Facebook team to address unanswered questions from the hearings serves as a valuable written corpus. This research aims to explore into these two sources to find any trace of manipulation. Therefore, the phenomenon of manipulation is exposed as a social, psychological, linguistic, and cognitive practice. These practices' factors or mechanisms are investigated, and a strategy is drawn to facilitate the perception of manipulation. Besides, the investigated markers, i.e., affect and evidentials, are discussed and categorised according to the needs of this research. The investigation of these markers in the corpora is based on a corpus-assisted method. The UMA corpus tool is used for the annotation, tabulation, and listing. Also, Appraisal Theory is embraced for the perception of affect; and Systemic Functional Linguistics is adopted for the analysis and understanding of evidentials. Furthermore, Critical Discourse Analysis is mainly used for the interpretation and discussion of the implications of the findings within manipulation. The results show the implication of affect expressions within the psychological mechanisms of manipulation and the expression of self and others. Furthermore, evidential markers are implicated in the shaping of the social and cognitive distinction between interlocutors, in addition to the implication within linguistic fuzziness. This research has also shown that the hearings could not be normal hearings where Congress members asked questions and the witness truthfully responded; it was a kind of play for unrecognised reasons.

Keywords: Manipulation, Evidentiality, Affect, Legal Discourse, Corpus Linguistics

Resumé

Le discours juridique entourant les entreprises technologiques, en particulier les plateformes de médias sociaux, est devenu de plus en plus important ces dernières années. Un de ces moments critiques a été les auditions du PDG de Facebook au Congrès. Les transcriptions de ces audiences ont fourni un corpus oral unique pour analyser. De plus, la lettre envoyée par l'équipe de Facebook pour répondre aux questions restées sans réponse lors des audiences constitue un corpus écrit précieux. Cette recherche vise à explorer ces deux corpus afin de trouver toute trace de manipulation. Ainsi, le phénomène de manipulation est exposé comme une pratique sociale, psychologique, linguistique et cognitive. Les facteurs ou mécanismes de ces pratiques sont étudiés, et une stratégie est élaborée pour faciliter la perception de la manipulation. En outre, les marqueurs étudiés : l'affect et les référentiels, sont discutés et catégorisés en fonction des besoins de cette recherche. L'étude de ces marqueurs est basée sur une analyse assistée par machine. L'application UMA est utilisée pour l'annotation, la tabulation et la liste. Aussi, la théorie des évaluations est choisie pour la perception de l'affect ; et la linguistique fonctionnelle systémique est adoptée pour l'analyse et la compréhension des référentiels. Décidément, l'analyse critique du discours est principalement utilisée pour l'interprétation et la discussion des implications des résultats avec la manipulation. Les résultats montrent l'implication des expressions d'affect dans les mécanismes psychologiques de manipulation et d'expression de soi et des autres. De plus, les marqueurs référentiels sont impliqués dans la formation de la distinction sociale et cognitive entre les interlocuteurs, en plus de l'implication dans le flou linguistique. Cette recherche a également montré que les audiences ne pouvaient pas être des audiences normales où les membres du Congrès ont posé des questions et le témoin a répondu honnêtement ; c'était une sorte de pièce théâtrale pour des raisons non reconnues.

Mots-clés : Manipulation, Evidentialité, Affect, Discours Juridique, Corpus Linguistique

ملخص

أصبح الخطاب القانوني المحيط بشركات التكنولوجيا، وخاصة منصات التواصل الاجتماعي، ذا أهمية متزايدة في السنوات الأخيرة. كانت إحدى هذه اللحظات الحاسمة جلسات استماع الرئيس التنفيذي لـ فيس بوك في الكونجرس. قدمت نصوص جلسات الاستماع هذه مجموعة فريدة من نوعها للتحليل. بالإضافة إلى ذلك، فإن الرسالة التي أرسلها فريق فيس بوك لمعالجة الأسئلة التي لم تتم الإجابة عليها في جلسات الاستماع. وهي بمثابة مجموعة نصوص مكتوبة قيمة. يهدف هذا البحث إلى استكشاف هذين النصين للعثور على أي أثر للتلاعب. وبالتالي، يتم التطرق إلى ظاهرة التلاعب كممارسة اجتماعية ونفسية ولغوية ومعرفية. يتم التحقيق في عوامل أو آليات هذه الممارسات، ويتم وضع استراتيجية لتسهيل تصور التلاعب. إلى جانب ذلك، تتم مناقشة وتصنيف العلامات التي تم فحصها، أي المؤثرات والاستدلالات، وفقاً لاحتياجات هذا البحث. يستند التحقيق في هذه العلامات إلى مساعدة الحاسوب. يستخدم تطبيق UMA للتحديد والجدولة وصنع القوائم. كذلك، استخدمت نظرية التقييم من أجل فهم التأثيرات؛ وتعتمد اللغويات الوظيفية النظامية لدراسة وتحليل الأدلة الاستدلالات وفهمها. إضافة إلى ذلك، يستخدم تحليل الخطاب النقدي بشكل أساسي لتفسير ومناقشة الآثار المترتبة على النتائج في إطار التلاعب. تظهر النتائج تأثير التعبيرات المؤثرة داخل الآليات النفسية للتلاعب والتعبير عن الذات والآخرين. علاوة على ذلك، فإن علامات الاستدلالية متورطة في تشكيل التمييز الاجتماعي والمعرفي بين المحاورين، بالإضافة إلى الغموض اللغوي. أظهر هذا البحث أيضاً أن جلسات الاستماع لا يمكن أن تكون جلسات استماع عادية حيث طرح أعضاء الكونجرس الأسئلة ورد الشاهد بصدق؛ لقد كان نوعاً من التمثيل لأسباب غير معروفة.

الكلمات المفتاحية: التلاعب، الاستدلال، التأثير، الخطاب القانوني، علم اللغة